

AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

SEP 6 1938



SEPTEMBER 1, 1938



Berberis Verruculosa

Soil Disinfection

"Every Man under His Own Tree"

New and Uncommon Perennials

A. A. N. Committees Appointed

AMERICAN NURSERYMAN

Chief Exponent of the Nursery Trade

F. R. KILNER, Editor

Published Semi-monthly by

AMERICAN NURSERYMAN
PUBLISHING CO.

508 S. Dearborn Street,

Chicago, Ill.

Telephone: Wabash 8194

New York Office—67 West 44th Street
N. L. Huebsch Tel. Murray Hill 2-4871

Entered as second-class matter December 14, 1933, at the post-office at Chicago, Ill., under the act of March 3, 1879.

SUBSCRIPTION PRICE, \$1.00 per year; outside United States, \$1.50. Single copies, 10c.

ADVERTISING RATES on application. Forms close on 10th of month for mid-month issue and on 25th of previous month for first-of-month issue. If proofs are wanted, copy should be on hand one week earlier.

TABLE OF CONTENTS.....	Page 24
INDEX TO ADVERTISERS.....	Page 26

AUTUMN PLANTING.

Each season shows a large amount of planting done in autumn, and it is to the nurseryman's advantage that the practice be fostered. It brings him earlier returns from his stock and it also decreases the burden of the spring rush.

While some plants are better if set out in spring than in autumn, there are some of which the contrary is true. For the great proportion remaining, autumn planting is an advantage, if done early enough, because it gives time for the roots to become established before freezing weather stops growth. In advocating autumn planting, it should be emphasized that the plants should be put in place early, not moved just before freezing weather. Proper care after planting is also important, since watering may be necessary in a dry autumn period and a mulch may be necessary later if snowfall is insufficient.

Plenty of evidence is available that autumn planting is successful in the case of most trees and shrubs. Sales can be increased at this time of year if nurserymen bring to the attention of their customers the advantages of planting at this time.

COMPETITION.

New competition is like a pace-setter in a race—an incentive and a spur that brings out the extra effort needed to set new records. How many times have you motored along a highway, traveling at what you considered a good speed, when another car came along at a better gait

The Mirror of the Trade

and, even though you had no desire to start a race, your foot went down harder on the throttle and you traveled somewhat faster? Competition is a good thing when it keeps us from becoming self-satisfied. It is exhilarating and inspiring.

But when some old jalopy pulls in from a side road, while you are traveling along the highway, and makes an attempt to hold the road by getting in your way, that is obstruction. Competition of that type kills business, does not develop it, because the pace has been halted, not increased. Such obstruction is found in business, though undesirable and unwelcome. It is not competition.

BERBERIS VERRUCULOSA.

A gem of a little evergreen shrub is the warty barberry, *Berberis verruculosa*, which gets both its specific and common names from the warty growths along the branches. An example of its neat, dense growth is shown in the illustration on the front cover. It is one of the most beautiful shrubs available for low edging work and hedges and is equally suited for rock gardens and for fronting foundation plantings. Three feet is a good maximum height for the shrub, and in its northerly limits it often does not exceed two feet.

Besides its many other fine characteristics, the warty barberry bears showy, fragrant, yellow flowers in spring, making a striking contrast with the glossy dark green foliage. The blooms usually appear singly, though they may occur in pairs or clusters of three, and are up to three-fourths of an inch across. The leaves are tiny, rarely exceeding an inch and often no more than half that large. They are like miniature holly leaves, curving downward at the edge, and are almost downy white underneath. The flowers are followed by black fruits covered with bloom. In some sections, the foliage takes on a gorgeous winter color. If this berberis is carefully pruned, it will form attractive spiny green domes.

Now comes the most disappointing fact—the plant is not overly hardy, but it can be used satisfactorily in the southern half of the United States and farther north with a little

care and protection. And, as is stated in a bulletin of the Arnold Arboretum, Jamaica Plain, Mass., this fine evergreen surely is worth the trouble of winter protection and the necessary pruning because of its lovely form and color.

Some winter protection is necessary at the arboretum, but the warty barberry, though it was severely injured, did not kill completely back to the ground, as did *B. Julianae*, during New England's severest winter, that of 1933-34. This shrub has attained what appears to be a maximum height of two feet in Highland park, Rochester, N. Y., but the plant is not absolutely hardy in the middle part of New York state. At the Morton Arboretum, Lisle, Ill., west of Chicago, this barberry has not been grown long enough to determine its hardiness, but it is believed that it may winter all right with protection if grown in a sheltered spot.

Some day perhaps an individual plant will be found that is highly resistant to cold or, through hybridization, a shrub with all the warty barberry's admirable characteristics may be developed. Such a shrub would certainly be a welcome addition to northern gardens.

Cuttings of *B. verruculosa* will root readily in sand when taken in early December, but in tests that have been made, cuttings taken at the same time and placed in peat rooted poorly. Of course, this species can be grown from seeds, too, which should be stratified over winter and planted in spring or sown in an outdoor frame in fall.

Nurserymen in sections of the country where *verruculosa* is dependable should find many uses for this splendid little evergreen; it has virtually all the features of a banner shrub.

BOB BURNS, of radio fame, gave his Uncle Fud's explanation for higher prices for agricultural products, in his newspaper feature recently, as follows: "When a farmer has to know the botanical name of what he's raisin', the zoological name of the insect that eats it and the chemical name of what will kill the insect, somebody's got to pay."

AMERICAN NURSERYMAN

[Registered U. S. Patent Office]

The Chief Exponent of the American Nursery Trade

*The Nurseryman's Forte:
To Make America More Beautiful and Fruitful*

VOL. LXVIII

SEPTEMBER 1, 1938

No. 5

Soil Disinfection

Methods of Sterilizing the Soil to Destroy Organisms Harmful to the Growth of Plants—By Glenn O. Randall, North Carolina State College

The terms "sterilization" and "disinfection" are used interchangeably when applied to the soil treatments to be discussed. I prefer the word "disinfection," for the reason that it is more descriptive of these treatments, since none of the treatments actually sterilize the soil. They simply serve to destroy the organisms that prevent normal plant growth. Many of the organisms beneficial to plant growth are left uninjured.

The disinfection of soil has many advantages. Some of those of especial significance are these: First, the destruction of soil-borne disease organisms that attack growing plants, such as those causing the disease commonly spoken of as damping-off; second, some of the soil disinfection treatments also serve to destroy insects found in the soil, many of which are destructive to growing plants; third, some of the treatments serve the added purpose of destroying weed seeds; fourth, soil disinfection heat treatments may serve to increase the availability of certain plant nutrients.

Granting that soil disinfection has the advantages just mentioned, the next question logically comes to mind, "To what extent can soil disinfection be used profitably?" It can be used to advantage for seed beds, for soil where young transplants are to be grown, for potting soil and for greenhouse soil.

There are a number of methods of soil disinfection, all of which have practical applications, but some of which are more practical under certain conditions than others, the value of each to be judged only after one has become familiar with the respective treatments.

The methods of soil disinfection may be divided into two groups: First, disinfection with heat, and second, disinfection with chemicals.

Soil Disinfection with Heat.

There are several different methods of giving the heat treatment. They include forcing of live steam into the soil, soaking the soil with boiling water and heating the soil to the desired point through the use of electricity. All of these heat treatments are based upon the principle of raising the temperature of the soil to the point where the organisms detrimental to plant growth are destroyed. A temperature of from 180 to 190 degrees Fahrenheit should produce the desired results.

The three methods most commonly used for forcing live steam into the soil are: First, steam-rake method; second, perforated pipe method, and third, the inverted pan method.

The steam rake is simply a device for forcing live steam into the soil at the desired depth. It resembles a spike-tooth harrow in appearance and is made from galvanized iron pipe. The live steam enters the mechanism through a comparatively large pipe and passes out through lateral pipes of slightly smaller size and finally through still smaller pipes about ten inches in length, which constitute the teeth of the harrow or rake. Each of the pipe teeth has small holes drilled about two inches above the lower end, through which the live steam passes into the soil. The large opening at the end of each 10-inch length of pipe is closed by pinching two sides of the pipe together so that it is wedge-shaped at the end. This facilitates pushing of

the whole rake into the soil to the depth of ten inches.

The perforated pipe method simply involves burying individual pipes which have been perforated at regular intervals with a single hole about three-sixteenths of an inch in diameter. The perforations are turned down so that when the steam is turned into each covered pipe it is forced down into the soil. These pipes should be spaced eighteen inches to two feet apart, so that each cubic inch of soil in the region to be treated will come into contact with live steam and be subjected to the temperature of from 180 to 190 degrees Fahrenheit.

The inverted pan, used in this method of soil treatment, as the name implies, is simply a large heavy galvanized iron pan, usually about four to five feet in width and six to twelve feet in length, to which is attached, at the top of the inverted pan, a hose connection so that live steam can be turned into the pan after it has been pressed in the soil to its full 10-inch depth. The length of time required for each treatment will depend upon the steam pressure and to some extent the soil type. It is simply essential that the treatment be given long enough to bring the temperature of the soil up to 180 degrees Fahrenheit.

It is important in the case of all of the heat treatments to have the soil properly prepared before it is disinfected. It should be prepared ready for planting and allowed to become slightly dry before the treatment is given.

Soil disinfection with boiling water simply involves thorough saturation of every cubic inch of soil treated with boiling hot water. This will serve to

bring the temperature of the soil up to the desired point for the destruction of those organisms detrimental to plant growth. This method is not generally practical except for the treatment of small areas.

The most recent development for disinfecting soil with heat is the use of electricity. This method is somewhat in the experimental stage yet.

The equipment necessary for disinfecting soil by electricity in benches or beds consists of sheet metal plates to be used as electrodes, 2-wire cable, clips for connecting the cable to the plates and a reliable glass thermometer. Successive plates are connected to opposite sides of a 230-volt circuit, and the resistance of the soil to the electrical current generates the desired heat for disinfection. The electrical equipment commonly used for disinfecting potting soil consists of a box sterilizer. One type that has proved satisfactory is twelve feet by four and one-half inches square and fifteen inches deep inside, and holds seven and two-tenths cubic feet of soil. The plates, thirty inches by fourteen and three-fourths inch, spaced six inches apart, are made of No. 14 gauge galvanized sheet steel and are supported in slots by boards nailed to the inside of the cypress plant box. Successive plates are connected to opposite sides of the 230-volt circuit. The top and bottom of the box are hinged to make loading and unloading easy. Another type of box sterilizer, instead of having several plate electrodes inside the box, has a large metal plate of the same size as the length and breadth of the box attached to the top and another attached to the bottom of the box. When the box is closed these metal plates serve as electrodes and come into contact with the soil.

Electricity compares favorably with steam for soil disinfection, at least as far as cost is concerned. Tests that have been conducted at different experiment stations and by power companies show a power consumption, for the resistance heating method for treating benches and beds, of 0.35 kilowatt hour per square foot five inches deep heated to 180 degrees Fahrenheit. With labor at \$2 per day and electricity at 4 cents per kilowatt hour, the cost is about $3\frac{1}{2}$ cents per square foot. The power consumption by the box sterilizer to heat the soil to between 180 and 211 degrees would be one kilowatt hour per cubic foot. The cost per cubic foot by the box sterilizer method

would be about 8.7 cents including labor.

Records, according to a test at Oklahoma Agricultural and Mechanical College, on steam disinfection of soil, including fuel and labor, show a cost of 2.8 cents per square foot twelve inches deep.

Chemical Soil Disinfection.

Chemical soil disinfection treatments are simply made and can be used to advantage by those who have not equipment for steam sterilization. It is necessary to remember, however, that chemical treatments are designed primarily for the control of disease organisms and are not completely effective against all soil-borne pests, such as the nematode, which is the small eelworm causing root-knot disease of plants. The heat treatments, however, are effective against all soil-borne pests.

The chemical most commonly used for soil disinfection is formaldehyde, or formalin solution. This solution is made by diluting one part of chemical formalin (forty per cent solution) with fifty parts of water. This should be applied uniformly to the surface of the soil at the rate of one-half to one gallon to each square foot. This amount should be sufficient to wet the soil with the solution to the desired depth. As soon as the solution has been applied, the area treated should be covered with heavy paper or moist burlap to hold the formaldehyde gas in the soil for several days. It is advisable to wait for ten days after the treatment before planting the area disinfected. Formaldehyde disinfectant costs about 5 cents per cubic foot.

Acetic acid solution may also be used to disinfect the soil for the control of plant disease organisms. A commercial grade containing fifty-six per cent acid should be diluted one part to fifty parts of water and applied at the rate of one-half gallon per square foot. Here again it is advisable to wait two weeks before planting the soil.

Zinc oxide (commonly sold at paint stores as zinc white) is a chemical that may be used in powdered form and applied to the surface of the soil to control damping-off fungi. Enough of this chemical, one-half to one ounce per square foot, is applied to the soil surface after the seeds have been planted to make a white film over the ground. This simply serves as a protective covering in that region where the damping-off fungi are most prevalent.

Various chemicals have been used to prevent damping-off of coniferous seedlings. One of these is sulphuric acid diluted at the rate of one pint to three gallons of water and applied over an area of eight to ten square feet immediately after the seeds have been sown.

The most recent development in soil disinfection is a machine which combines formaldehyde gas with steam vapor so that the combination can be forced into the soil in the same way as steam, when the latter is used alone. Such machines cost between \$300 and \$400 or more and can be used for disinfecting the soil at a cost of approximately 8 cents per square foot.

"INCUBATOR" FRUITS.

While the "incubator" baby is no longer the novelty that it once was, it still rates passing notice and now we have "incubator" fruit trees which are heralded as marking a distinct advance in the breeding of new varieties of fruit, especially with fruits like peaches, cherries and plums, of which it is exceedingly difficult at times to obtain viable seeds.

The methods whereby the incubator idea has been applied to fruit breeding have been worked out by Dr. H. B. Tukey, horticulturist at the New York state experiment station, at Geneva.

"The method calls for the cutting open of immature fruits before the embryo is fully matured, removing it under aseptic conditions and placing it in a small bottle which contains the essential nutrients for plant growth," says Dr. Tukey. "Embryos treated in this way have been grown to small plants, then transferred to the greenhouse and finally moved to the orchard where some of them are now fruiting."

This method has proved of particular value for certain varieties and classes of fruits which often produce only abortive seeds, such as early-ripening varieties of peaches, cherries and plums. Attempts to transmit the desirable characters of these fruits when used as parent varieties in the usual breeding operation often meet with failure because no live seeds are obtained. By the "incubator" method the immature embryo is rescued from the mother plant before it disintegrates, placed under favorable growth conditions and grown to fruiting age.

"Every Man under His Own Tree"

Human Kinship with Nature Draws Mankind to Seek the Companionship of Growing Things as a Sustenance of the Spirit—By W. J. Cameron

We are always struck with the kinship mankind naturally shows with the growing things. Those of us who have visited the tenements of New York, going down those narrow canyons of brick, looking up here and there, have had our eyes held by brief borders of green on the ledges of buildings on each side of the street, and we stop and wonder that those people in those breathless districts with no tree within miles, there on the window ledge, have their gardens and nurseries and bits of green. You stand there in something like awe at the way the human spirit breaks out and declares its kinship with nature in these things.

As for trees, in the days of my boyhood, there were plenty on the streets, but as for the touch of the landscape art, which marks the common lot nowadays, there was little except in the houses of the rich where usually something stiff and formal was attempted, nothing very vital or inviting.

However, there were trees in the streets. Even far downtown you found trees in the streets, and it is pleasant to remember some of the old stores we knew fifty years ago with their sentinel lines of trees. Some of the old photographs show them to this day.

But later there came along a period of improvements. That is a word that almost makes me swear sometimes when I hear it applied to trees. They "improved" the streets. At least that is the word they used for the dreadful assassination of all the greenery, and until recent years it has continued unabated.

You go out to some of the towns in Michigan and you find a town's ambition to imitate Detroit, and they slash down those shady rows and make the streets look as bare as Woodward avenue, an arid waste of glaring concrete and dusty uninviting spaces—all in the name of "improvement." If everybody were not saying, "There ought to be a law," I would say there ought to be a law in every state that no town would be permitted to improve its main street until a

committee of nurserymen had first sat on the job.

I have often wondered how many hundreds of thousands of dollars a row of trees in front of this hotel and some of our larger stores would mean in trade to them if they had them as they used to have them fifty years ago. I think trees would be great money-makers for them.

Of course, we had a reversion from that. There came city parks. They said we ought to have something to remind us we are living upon a green earth, but that is only a partial repentance for the folly we had done. It was no real substitute. When a man has to go a mile to see a tree or a hedge we are not living up to the Bible's ideal of "every man under his own vine and fig tree, none daring to make him afraid."

I have often wondered at that connection of ideas in the Bible, every man having his own grove, his own contact with land, none daring to make him afraid. Those are the kind of people you can't make afraid, not only because of being established on land, but of something that comes into their blood out of nature which makes them so conscious of their part as free men that none dare make them afraid. That vine and fig grows in

Opening with the remark that "a man can gain quite a reputation for wisdom by speaking only five minutes at a time, but when he attempts wider territory he may risk that reputation," W. J. Cameron, director of public relations of the Ford Motor Co., proved otherwise in his 50-minute talk before the A. A. N. convention at Detroit, for his comments were as meaty, well phrased and to the point as his famous short talks over the radio on Sunday evenings. His thoughts ranged widely over economics, politics and the social order, yet he spoke to the point on the nurserymen's part in civic life, presenting them with as trenchant sales arguments in their behalf as advertising writers have penned. That portion of his extempore address, about one-third of the whole, is printed here from the stenographic transcription, as of direct value to nurserymen everywhere, regardless of their political opinions or economic beliefs.

their lives. We need those things, not only in public parks, but in our daily life, not only as decoration, but as familiar companions.

Now, with my background of observation in Detroit as I have partially described it, much of our folly and neglect is being remedied by the nurserymen. You almost never see a new home erected these days, however modest it is and however little it may cost, without some signs of the nurserymen's art around it. All the newer sections of our city take on an aspect quite different from the older sections because of this.

The work of the nurseryman is as essential to a finished house as is that of the painter and the plasterer. The thing is not complete until that last touch of its kinship with the earth from which it rises has been given it. The effect of this is evident everywhere.

Some of the arts are hard to urge upon people because their benefits are not immediately apparent. You cannot objectify the results people are going to get from patronizing those arts. That is not true with the art you represent. As practical Americans we always name the utilitarian values first.

We go up over the city in an airplane and leave the arid districts where we see nothing but brick and dirt, like a city of monoliths stuck up into the air, and move out into parkways where we see the homes of the people seemingly embowered in trees. That must make a difference to the city, to the very climate, to the heat it suffers from in summer and cold in winter. There may be room for discussion about that, but we do know it makes a difference to health.

Those sections not embowered in trees show a higher disease rate than those sections which have their normal complement of greenery. There is no discussion so far as health is concerned, because we do know that. We also know that neighborhoods noted for their profusion of greenery are better neighborhoods so far as the people dwelling in them are concerned.

We know that homes cared for in

this respect sell more readily and at better prices. They have higher resale values and are not allowed to depreciate so quickly as homes that have not been given this attention. So, on all sides there are these utilitarian values which a layman, like myself, using his eyes as he walks along the street, can find immediately apparent.

There are other values we can't see. We can't eat these trees and shrubs, and we will not burn them, but we do know they yield a fruit by which, consciously or unconsciously, we profit—the fruit of a quiet mind, much to be desired these days.

Many a man, sitting in his yard looking at a tree after coming from the turmoil of the week, on the Sabbath, sitting under his own vine and fig tree, especially if it is a tree that has invited a bird to build its nest, has seen something which has given him a grip upon fundamentals which his contact with changing business could not give him.

That is what happened to the prophet Jeremiah when his great nation was in turmoil. He looked at the tree and the tree said something and what it said made him the prophet Jeremiah. These things draw us from crowded haunts of trade, these green sentries of ancient woods, and confirm us in our spiritual affinity with all these forms of life with which you men are dealing.

It is striking that in all our great enthusiasm for freedom, for instance, we have always turned to the greenness of nature for our symbols. There was the liberty tree of our fathers; there was the pine tree flag which they lifted against the oppressors in their day. The great festivals of spirit, such as Christmas, turn to the tree; and of hope, such as Easter, turn to flowers, and in our thanksgiving for the fruits of the earth in harvest time, we gather the bowers and leaves of harvest to deck our places of ceremony, and upon the grave we plant the acacia, which gives us the message of enduring life.

We cannot get away from the meanings which this other level of nature has for us. Arbor day is a perfect illustration of the truth of that. Who started Arbor day? Arbor day was started in the western part of the country, in a naturally treeless portion, by people who had come from the forested eastern portions of the

country. They had known the forests of New York and Pennsylvania and Massachusetts, and going to the west, they missed all that, and from them, many years ago, in their hunger and their thirst for the touch and sight of these growing things, they established what we know as Arbor day.

These things draw us. We see them living along, rooting in their soil, drawing in their sustenance from sun, from shower and from the air. We see them deriving from and contributing to the scheme of things. We see them fulfilling their own span by an inward law, and we get a sense, just by looking at them, that something is going right in this universe, that something on this earth is going right.

We turn from our own ragged economics to the economics of God, and though our own affairs may be very badly muddled, we see in this world outside of us something that is going on, and something that is going right. Although we are not always conscious of the message which that brings to our brain, and which sinks through our brain into our mind and through our mind into the deeper consciousness, nevertheless it is happening all the time in that companionship which we know as nature.

REDELBERTA, A NEW PEACH.

A crate of delicious fruit received from the Columbia & Okanogan Nursery Co., Wenatchee, Wash., enabled the staff of the American Nurseryman to enjoy the taste of the new peach, Redelberta.

The discovery of Jay Perry, Kennewick, Wash., Redelberta is a bud sport of the Elberta. It was discovered by Mr. Perry in 1928. While walking through his orchard he saw a limb of a peach tree with fourteen red peaches among the normally colored Elbertas. This limb was used for budding, and by 1932 twenty-four trees bearing the new fruit were growing. The trees all came true to form, and the well formed fruit bore characteristics of the parent limb.

The fruit resulting from these trees ripens ten days to two weeks earlier than the Elberta peach, and it has a solid red color cheek and apparently colors solid red whether it is in the outside or inside of the

tree, regardless of the amount of foliage. It has bearing habits similar to the Elberta, and the tree evidently is as hardy as Elberta. The fruit is of higher quality than the Elberta, and the flesh is of finer texture and is not bitter around the pit. It apparently ships well.

Mr. Perry obtained a patent for this fruit, and exclusive marketing rights have been assigned to the Columbia & Okanogan Nursery.

FRUIT PRICES DOWN.

Fruit prices are at lower levels this summer than supply conditions alone would indicate, according to the bureau of agricultural economics of the United States Department of Agriculture. The relatively low prices of the summer fruits are attributed mainly to reduced consumer purchasing power. Increased industrial activity is expected to bring some improvement to consumer incomes during the fall and winter.

In the face of much smaller supplies of apples than in 1937, prices of most summer apples are not greatly above last year's prices.

The 1938 apple crop is indicated to be about one-third smaller than the large crop of 1937. Production is expected to be relatively lightest in the central states, although the crop in the Atlantic Coast states is indicated to be much smaller than the large crop of last year. Production in the western states is expected to be about the same as it has been in each of the past six or seven years.

The pear crop is only slightly larger than the 1937 record high, but prices are considerably below those of last season. The California grape crop is slightly smaller than that of last year, but prices of early table grapes are materially lower than prices received last summer. Prices of oranges, lemons, grapefruit and peaches are also comparatively low, but variations in supplies of these fruits make a direct comparison with last year difficult.

THOUGH millions of acres have been removed from farm production in New York state in the past half-century, it is stated that total production from the remaining acreage is still twenty per cent greater than fifty years ago, the result of more efficient methods.

New and Uncommon Perennials

Second in a Series of Articles on New Plants Particularly Profitable Because of Showy Character, Easy Culture and Long Blooming Habit — By C. W. Wood

The scene is shifting rapidly in the delphinium world, so rapidly in fact that what one says today may be obsolete tomorrow. Many things of recent occurrence have contributed to this state of affairs and perhaps none has had more influence, both real and potential, than the coming to our shores of the new pink variety, *D. Ruysii* Pink Sensation. I have not seen the plant yet, but I have been told by friends in England that it made a rather poor impression on the general gardening public at its début at the English shows this year. Notwithstanding all that, the plant holds vast possibilities in the hands of breeders and it may be that it will prove better under American conditions than some think. In any case, it will bear watching. No doubt other, and perhaps better, things will follow further selection of these nudicaule hybrids, and one reads hints in the European press that delphiniums with pure scarlet flowers which will be amenable to garden conditions—something *D. cardinale* has never been in most parts of the country—are in the offing.

Speaking now of matters of more immediate concern, let me say a few words in praise of the new Pacific strain of delphiniums which came on the market two or three years ago. The perfect delphinium is still a long way off, of course, but this strain comes nearer to it than anything I have ever grown. Its individual flowers lack size when compared with many other strains, but the latter are often merely monstrosities, requiring support to keep their weak stems from bending and breaking in the lightest breezes and needing constant nursing to keep them from falling prey to the ailments which attack them at every stage. This Pacific strain not only has vigor, but it has a finished appearance in its sturdy, graceful stems, which appeals to me as no other of its kind has ever done. Before plunging into it, it may be well to make experiments on your buying public, but it should be investigated by all neighborhood growers.

The longer I grow *Delphinium cinereum* the more impressed I am with it. The name is only tentative, being the one under which it came to me several years ago from a European correspondent, who indicated that it was a Himalayan species. Be that as it may, the plant is one of the most accommodating things I have ever grown, blooming in three months, more or less, from seeds and continuing for years in a happy, vigorous state. The flowers, which are entirely spurless and of a deep azure blue—the most entrancingly beautiful shade of blue that I have ever seen in a flower—are borne on freely branched plants up to eighteen inches in height. They smile in the face of hot dry weather; they come through our most severe winters, and they bloom during July and August, when their particular shade of blue is most needed. Used as an annual and planted not over three or four inches apart, they make a really usable cut flower and one that receives immediate attention. Used as a perennial, it fits into rock garden or border, edging or cutting garden, filling all of these and many other roles with distinction. It is, like most delphiniums, easily grown from seeds and does best in a dry, sunny situation.

One could go on indefinitely on the subject of delphiniums, pointing out good things here and there, but space will not permit dwelling too long in one quarter. I should like, however, to mention one more, *D. Requienii*, before passing on. It is not in commerce at present, either in this country or in Europe, so far as I know, but it surely will be soon and is mentioned now so that those interested may be on the lookout for it. I am not sure that it will prove to be a highly popular garden plant in its present form and rather suspect that it may not, for many visitors to my garden pass it by without comment or question, though every delphinium grower is immediately attracted to it, even when it is not in flower. It makes an ample tuft of large, pale green leaves, which appear as though they were coated

with varnish. So far they have shown no signs of the usual delphinium diseases. From this tuft springs a massive spike to a height of six feet or so under ordinary care and eight feet or more under good culture. These spikes are clothed in rather small, pale lavender flowers with an inconspicuous spur and a brownish bee concealed under a prominent hood of the same color as the flower. If I am not too badly mistaken, this plant will have a beneficial effect on future delphinium breeding, adding an indestructible spike if nothing else, and it may prove sufficiently intriguing to amateurs to make it a popular garden plant.

If one were to depend on the average plant list, *Veronica Blue Spire* is about the only good new thing in the genus that is available in this country. I do not want to disparage Blue Spire in the least, because its mingling of *longifolia subsessilis* and *spicata* characters, in which the splendid color of the former is combined with the floriferousness of the other, makes a really worthy garden plant and a needed addition to the blue early summer flowers. The value of Blue Spire should not, however, blind us to the merits of *V. incana rosea*. The latter is one of the most pleasing things in the veronica line that I have found in a long time, its 8-inch to 12-inch spikes of delicate pink flowers over tufts of white, woolly leaves making a combination of great beauty. Its flowering season, during June and July, also adds to its usefulness, as does its desirability as a rock garden, edging, or front-of-border plant. Both plants mentioned in this paragraph are resistant to drought and heat and can consequently be recommended to the casual gardener. Propagation is from cuttings in the spring.

The best thing that has happened in gayfeathers for a long time occurred when the pure white form of *Liatris scariosa* came along. I have heard several stories of its advent and, as not all of them can scarcely be correct, none will be repeated until the matter is settled. (Will

anyone having information or thoughts on the subject kindly communicate with the writer?) Whatever that may have been, it does not alter the fact that in *L. scariosa alba* we have one of the most promising new cut flowers that have appeared in the perennial field for some time and, judging from present popularity of the purple *L. pycnostachya* and type *L. scariosa*, it is no doubt safe to say that the white form will be used by the millions when stock becomes available in large quantities. Those who are familiar with *L. scariosa* know that it differs not a little from the more popular *L. pycnostachya*. The greatest difference, so far as the gardener is concerned, is found in the fact that the flower heads of *L. scariosa* are farther apart on the stem, making a less massive spike, but at the same time a pleasing one. It also blooms later, giving it added value by prolonging the cutting season. Even though division can be practiced, it is slow work and stock so handled seems to deteriorate; consequently, seedage is recommended. Seeds planted in an outdoor frame in the autumn will vegetate freely the following spring and will bloom the second autumn, when roguing should take place as rapidly as color shows if seeds are to be saved. The percentage of whites varies with different lots of seeds, according to my experience, some showing as low as twenty-five per cent and one as much as seventy-five per cent. If you dislike to wait two full years to see results of your efforts, seeds planted in flats in autumn may be brought into the greenhouse in February. Most of the plants, if grown along without check, should bloom the first autumn. I believe it is good advice to urge every plant grower to get started on this outstanding perennial.

As I look back over what has been written in this series, it strikes me that I have quite forgotten the grower of rock garden material, and so I shall devote the remaining space in this issue to his needs.

The most charming, the most ethereally beautiful rockery plant among the new items in my garden is the tiny Japanese meadow rue, *Thalictrum kiusianum*. I cannot remember when I have had so much pleasure out of such a little mite as I have had in watching these plants

extend themselves over the surface by dropping roots from the stems as much as four inches distant from the old plant, soon making a low mat of meadow rue foliage, over which are displayed heads of feathery, lilac pink flowers from late May until autumn. All it needs, if experience here is any criterion, is a well drained soil with some leaf mold and partial shade. Propagation is from division and from seeds.

I had meant to include *Aquilegia Jonesii* in this issue, but find that space will not allow mention of all the uncommon columbines and, as I wanted to dwell at some length on the culture of this so-called difficult alpine, I shall let it go until the next issue, confining these concluding remarks to two or three other dwarfs. Of the comparatively easy ones, *A. saximontana* (*A. brevistyla*) is to be numbered among the best. It is, from the gardener's standpoint, essentially a dwarf Rocky mountain columbine, with the same attractive blue, though short-spurred, flowers on stems about six inches high. It is a little beauty and, like its big brother, is rather short-lived in the east. That is a characteristic of most columbines, however, and so we should be willing to replace them frequently if we want to enjoy them. I suspect that it requires an acid soil and am sure that it needs perfect drainage and is better with a rock under which it can burrow its roots.

Perhaps the easiest to grow, and incidentally among the best, of the small columbines is *A. pyrenaica*. Its small, lacy foliage and blue flowers on 8-inch stems make it an attractive plant, and its blooming season in June and July, after most of its kind have given up their blooming efforts, adds to its usefulness. *A. discolor* is a dwarf form of the next preceding, with blue and white flowers on 3-inch to 4-inch stems. Both are easily accommodated in any well drained, sunny or partly shaded spot and, because of their ease of culture and attractive appearance, should become popular among home gardeners. Propagation is from seeds.

BROOM SHRUBS.

The bulletin of popular information issued by the Arnold Arboretum for July 15 lists cytisus, broom shrubs, that are suitable for growth in New England. According to the informa-

tion, these shrubs are not difficult to grow in that section. Many of them are now growing at the arboretum, but they are susceptible to winter-kill. Those listed as suitable for growth and worth the effort are: *Cytisus scoparius*, a bushy shrub, five to six feet tall, with golden yellow flowers; *Cytisus nigricans*, a shrub that blooms during July; *Cytisus praecox*, a 3-foot shrub, covered with lemon-yellow flowers; *Cytisus purpureus*, a 1½-foot shrub, bearing purple flowers. Other hardy and dwarf species are listed with information as to their growing season.

NATIVE CHIMAPHILA.

A successful method for propagation of *Chimaphila umbellata* and *C. maculata* has been reported by Robert S. Lemmon, writing in the June issue of the Journal of the New York Botanical Garden. Many unsuccessful attempts have been made to transplant them from wild stands.

After many experiments with various sowing media, exposures, moisture, age of seeds and light, Mr. Lemmon obtained satisfactory results with the use of top-growth cuttings germinated in a mixture of sand and peat, and some in plain sand, in an unheated outdoor propagating frame.

These cuttings were taken at 2-week intervals from May until November from old wood, new wood with old wood heel and new wood without heel. The only ones to show any response were those of the new wood with a short heel or "stub." From this group a germination of seventy-five to eighty per cent was obtained. The highest results were reported from *C. umbellata*.

The experiments were continued over a period of two years, and it was found that sand is the best medium in which to grow the cuttings. Most of the cuttings do not root until they have passed a summer and winter in the frame with their foliage in perfect condition at all times. However, after this period development is rapid once the roots have been established.

When the root systems are well developed the cuttings should be potted in a sandy, acid leaf mold of a pH of 4.0 to 5.0. After this potting the cuttings are put in peat moss in full shade and kept well watered until they are set out in their permanent places the following spring.

Opportunities Overlooked

Possibilities of Increasing Business by Alertness to Changing Conditions Pointed out in President's Address before Southern Nurserymen's Convention—By Charles M. Smith

Changing conditions in the agricultural and horticultural world call for alertness. The last ten years have seen an increased interest in conservation of natural resources with special emphasis on forestry. We should be asleep if we did not seize this opportunity. Our nurseries, so long dedicated to the growing of fruit trees and ornamental shrubbery, can be profitably expanded to include the growing and selling of forest trees, and at the same time we shall be doing our part in this movement of conservation. I recently read an article in an Atlanta newspaper that I would like to quote: "The southern forest experiment station of New Orleans reports thirty-eight pulp mills with a total capacity of about 10,000 tons of pulp per day and a total investment of approximately \$200,000,000 were in operation or under construction at the beginning of this year in ten southern states. These mills will require annually about 5,000,000 standard cords of rough wood. The report emphasized that the continued operation of the south's expanding pulp industry was dependent upon new growth replacing the timber used for pulp wood as fast as it was cut from the forest." I think this is an opportunity we should not overlook.

Someone has to grow the seedlings for replanting, and I feel we nurserymen should get the job. It is logical

for the nurserymen to grow this stock and to show the government nurseries now operating that we can do it better and on a scale that would be profitable both to ourselves and to our customers, whether government or individuals. Where we now

owner a little about planting and caring for his plants? The selection of proper plants should be stressed.

Too often our own home grounds and those of our offices and packing houses are not good advertisements of our wares. Why not resolve this year to make our properties so attractive that our goods will sell themselves? This leads to another question. How many of us know anything about landscaping? Knowing how to plant a home so as to add to its beauty and charm is just as essential for a nurseryman as to know how to grow plants. We must be good growers, good salesmen and good landscapers. They go hand in hand.

The problem of each of us is how to make our business pay. As nurserymen we have the greatest opportunity to make livable, beautiful and profitable the homes and lands of our country. We should welcome this opportunity and give all the service in that direction we can and in some cases do it without pay. We should be foremost in any project that involves planting, reforestation, wild flower protection, forest fire prevention or beautifying vacant lots, streets and highways. In fact, we should sponsor these projects ourselves, be leaders, not followers. Only too often it is the woman's club or the garden club that initiates these projects. We as nurserymen



At Southern Nurserymen's Convention.
(Miss Evelyn Monroe, Atlanta; W. C. Daniels, Secretary-Treasurer; Charles M. Smith, Retiring President, and Miss Daniels.)

sell a thousand peach trees or apple trees, we might easily sell a million pine trees.

Another opportunity is that afforded by the F. H. A. Thousands of new houses are being built. How many are adequately landscaped? Far too many are planted by the old hit-or-miss method, an arbor-vitæ at each corner, a spiraea in the middle, and in the back a row of straggling ligustrum or abelia passing as a hedge. Can't we as nurserymen do something to teach the average home-



Members and Guests of Southern Nurserymen's Association at Barn Dance at Fortieth Anniversary Meeting at Atlanta, Ga., August 10.

could do these better and cheaper, for that kind of work is in our line.

Lastly, I think we as an organization should go on record as opposing unwarranted government restriction and government competition.

I conclude by reminding you that now is the accepted time; your greatest opportunity is now. Your chances are on every corner, every new or unplanted home, every piece of eroded or cutover land. This is literally true. Whether we take advantage of these chances or whether we do not, in like proportion our nurseries will grow and make a living for us.

TEN YEARS' PROGRESS.

Ten years ago Mr. and Mrs. John W. Sarber, Topeka, Kan., were amateur gardeners particularly interested in roses. They were so successful with their own roses that they began to supply the neighbors, and from this across-the-fence beginning on a city lot has grown the Sarber Seed & Nursery Co., with an air-conditioned office, a storage house and a 3-acre sales yard.

By 1935 the Sarbers were selling shade trees, ornamental shrubs, evergreens and perennials in addition to roses. A graduate landscape architect was added to their force. In the autumn of that year an office in modern style was built where they are now located, 3100 West Tenth street, on state highway 10 in the western part of Topeka.

The grounds are attractively landscaped with a wide assortment of materials. The sales yard is solidly planted to shade trees, evergreens and shrubs, but probably the most

prominent feature is the formal rose garden in the front bordered with Beeson privet, a variety recently introduced. The roses with which they began are still one of the leading items, although they carry the most complete assortment of evergreens of any retail nursery in Kansas. Ample parking space has been provided about the office, where twenty-five cars can be parked off the highway.

The large neon sign, which can be seen for several blocks by those approaching from the east on the way to Westboro, an exclusive residential suburb, is credited with attracting many prospective buyers.

The cash-and-carry department, which is advertised during the spring season, has proved a popular and profitable feature. Popular items at low prices are advertised in the daily papers, but many persons who come only for a specific item see the display of plant material, get ideas on how to use it from the grounds themselves and end by employing the complete landscape service.

The Sarbers have advertised over radio station WIBW for six years, being pioneers among midwestern nurserymen in the use of this advertising medium. By this means they have developed an extensive mail-order business in nursery stock and seeds, during the past season having made shipments to twenty-six different states.

Their landscape operations, which include the making of lawns and the moving of large trees, are carried on not only in Topeka, but in towns within a radius of fifty miles. At the height of the planting season they take on seven extra employees.

LILACS IN NORTHWEST.

The season of French lilacs at the Dominion experiment station, Morden, Manitoba, was noteworthy in point of abundance, size and persistence of bloom this season. There are hundreds of varieties. The following among double-flowering types were impressive:

White—Edith Cavell, Ellen Willmott, Mme. Lemoine, Mme. Abel Chatenay.

Pink—Leon Gambella, Mme. Antoine Buchner, President Viger, Carmen, Marechal Lannes, Belle de Nancy, President Fallieres.

Reddish—Mrs. Edward Harding, Edouard Andre, Paul Thirion, Mme. Leon Simon, President Loubet, Etoile de Mai, Desfontaines.

Blue—Condorcet, Abel Carriere, Emile Gentil, President Grevy, Comte Adrien de Montebello, Godron.

Mauve—Charles Sargent, Marc Micheli, Maurice de Vilmorin, Victor Lemoine, Claude Bernard, Jean Mace.

Purple—Violetta, Paul Hariot, Charles Joly.

Practically all lilac blooms fade with age and the color descriptions and classifications vary as to period of bloom when observations are made. An example is the variety Congo. In contrast, Volcan and Pascal retain their rich purple hues comparatively well. Congo, at Morden, rapidly fades from a rich red purple to a weak mauvy pink.

A list limited to a few double lilacs would include the following, W. R. Leslie states: Edith Cavell, Ellen Willmott, Leon Gambetta, Mme. Antoine Buchner, Mrs. Edward Harding, Charles Joly, Condorcet, Emile Gentil, Charles Sargent, Marc Micheli, Violetta and Paul Hariot.



Part of Sales Ground at Kansas Nursery Can Be Seen Between Sign and Air-conditioned Office with Storage Cellar in Rear.

A. A. N. Committees Appointed

Roster of Committees of American Association of Nurserymen Revised by President Chet. G. Marshall for Increased Activity in Coming Year

Committees for 1938-39 have been announced by Chet G. Marshall, president of the American Association of Nurserymen. With a view to greater activity on the part of the committees the ensuing year, President Marshall has reduced the numerical size of some, and enlarged others, for greater efficiency. He has suggested that the chairman of each committee contact its other members and draw up a program of activities for the year. Evidences of action on the part of some of the committees are apparent already. The list of appointments follows:

Arbitration—Richard P. White, Washington, D. C., chairman.

Arrangements—E. M. Dering, Scappoose, Ore., chairman; Paul E. Doty, Portland, Ore., vice-chairman; W. E. McGill, Fairview, Ore., vice-chairman; C. Bert Miller, Milton, Ore.; Earl C. Housewear, Woodburn, Ore.; J. Frank Schmidt, Troutdale, Ore.; A. C. Peterson, Scappoose, Ore.; George C. Roeding, Jr., Niles, Cal.; Ray D. Hartman, San Jose, Cal.; Harry Marks, Los Angeles, Cal.; John H. Van Barneveld, Puente, Cal.; H. M. Eddie, Mount Vernon, Wash.; Howard E. Andrews, Seattle, Wash.; A. H. Steinmetz, Portland, Ore.

Botanical gardens and arboreta—Robert Pyle, West Grove, Pa., chairman; Harlan P. Kelsey, East Boxford, Mass.; F. R. Kilner, Chicago, Ill.; George C. Roeding, Jr., Niles, Cal.; L. M. Riggs, Longview, Tex.; E. Y. Teas, Houston, Tex.; R. D. Underwood, Lake City, Minn.; Henry Hicks, Westbury, N. Y.

Legislation—C. O. Siebenthaler, Dayton, O., chairman; Miles W. Bryant, Princeton, Ill.; Paul Stark, Louisiana, Mo.; Lester W. Needham, Springfield, Mass.; Paul Doty, Portland, Ore.; Paul Fortmiller, Newark, N. Y.

Market development and publicity—Paul Stark, Louisiana, Mo., chairman; Owen G. Wood, Bristol, Va.; George Siebenthaler, Dayton, O.; Earl Housewear, Woodburn, Ore.; Charles Hess, Mountain View, N. J.; V. J. Vanicek, Newport, R. I.; H. G. Seyler, Weiser Park, Pa.; E. S. Boerner, Newark, N. Y.

Membership: Alabama—Thomas W. Naugher, Chase; Marcus Byers, Chase. Arkansas—T. L. Jacobs, Rogers; Carl Tromble, Bentonville. California—Ray Hartman, San Jose; Harold McFadden, Compton. Colorado—Scott Wilmore, Denver; G. A. Tolleson, Denver. Connecticut—E. D. Robinson, Wallingford. Delaware—Clayton Bunting, Selbyville. Georgia—C. R. Smith, Concord. Illinois—A. H. Hill, Dundee; Miles W. Bryant, Princeton. Indiana—Vernon H. Krider, Middlebury; M. B. Esterline, New Augusta. Iowa—C. C. Smith, Charles City; Harold Parnham, Des Moines.

Kansas—Harold Crawford, Ottawa; Robert Adair, Wathena.

Kentucky—Alvin Kidwell, Sparta; H. J. Tilson, Lexington.

Maine—F. C. King, Oquossoc.

Maryland—Homer S. Kemp, Princess Anne.

Massachusetts—Cornelius Van Tol, Falmouth.

Michigan—Arthur L. Watson, Grand Rapids; Harold E. Hunziker, Niles; Harold Paul, Monroe.

Minnesota—C. H. Andrews, Faribault; B. J. Loss, Lake City.

Mississippi—H. M. Owen, Columbus.

Missouri—A. E. Weston, Neosho; W. A. Weber, St. Louis.

Montana—T. E. Mills, Jr., Helena.

Nebraska—Lloyd A. Moffet, Fremont; Harvey Williams, Lincoln.

New Hampshire—C. H. Williams, Exeter.

New Jersey—John Jennings, Springfield; Lester Lovett, Little Silver.

New York—Jac Bulk, Babylon, N. Y.; Howard C. Taylor, Tarrytown; D. B. Belden, Fredonia.

North Carolina—L. R. Casey, Goldsboro.

North Dakota—George F. Will, Bismarck.

Ohio—Herman Brummé, Madeira; D. Barrett Cole, Painesville.

Oklahoma—J. Frank Sneed, Oklahoma City; Jim Parker, Tecumseh.

Oregon—E. M. Dering, Scappoose.

Pennsylvania—Eugene Muller, Norristown; R. F. Elliott, Evans City.

Rhode Island—V. J. Vanicek, Newport.

South Dakota—H. N. Dybvig, Colton.

South Carolina—to be named.

Tennessee—Lee McClain, Knoxville; R. H. Jones, Nashville.

Texas—Harvey Mosty, Kerrville.

Utah—J. J. Porter, Salt Lake City.

Virginia—Kenneth McDonald, Hampton.

Washington—W. L. Fulmer, Seattle.

W. Virginia—B. L. Potter, Huntington.

Wisconsin—Karl Junginger, Madison.

Necrology—F. R. Kilner, Chicago, Ill., chairman; Peter J. van Melle, Poughkeepsie, N. Y.; John Fraser, Huntsville, Ala.; Arthur Champion, Perry, O.; A. J. Bruce, Des Moines, Ia.; C. C. Mayhew, Sherman, Tex.; George C. Roeding, Jr., Niles, Cal.

Nomenclature—Harlan P. Kelsey, East Boxford, Mass., chairman; J. H. McFarland, Harrisburg, Pa.

Program—Executive committee acts in this capacity.

Quarantine—Albert F. Meehan, Dresher, Pa., chairman; Harold Welch, Shenandoah, Ia.; Henry B. Chase, Chase, Ala.; Edwin J. Stark, Louisiana, Mo.; Wayne McGill, Fairview, Ore.; John A. Armstrong, Ontario, Cal.; Oliver Hobbs, Bridgeport, Ind.

Standardization of grades and horticultural practices—William Flemer, Jr., Princeton, N. J., chairman; H. S. Chard, Painesville, O.; D. Barrett Cole, Painesville, O.; William Natorp, Cincinnati, O.; Louis Hillenmeyer, Lexington, Ky.; Paul Doty, Portland, Ore.; J. J. Pinney, Ottawa, Kan.

Trade barriers—Lee McClain, Knoxville, Tenn., chairman; Harold Welch,

Shenandoah, Ia.; Lester Lovett, Little Silver, N. J.; Henry B. Chase, Chase, Ala.; Paul Stark, Louisiana, Mo.; Ray Hartman, San Jose, Cal.

Trade practices and ethics—Louis E. Hillenmeyer, Lexington, Ky., chairman;

A. F. Lake, Shenandoah, Ia.; John A. Armstrong, Ontario, Cal.

Trade relations—D. Barrett Cole, Painesville, O., chairman; A. E. Weston, Neosho, Mo.; John D. Siebenthaler, Dayton, O.

Transportation (convention)—W. J. Smart, Dundee, Ill., chairman; Richard P. White, P. J. van Melle, Poughkeepsie, N. Y.

Transportation and traffic manager—Charles Sizemore, Louisiana, Mo.

U. S. Chamber of Commerce—National councilor, Robert Pyle, West Grove, Pa.; delegates, Lester C. Lovett, Little Silver, N. J., and John Jennings, Springfield, N. J.

U. S. Department of Agriculture, bureau of plant industry and entomology—Henry B. Chase, Chase, Ala., chairman; Homer S. Kemp, Princess Anne, Md.; Ed. Costich, Westbury, N. Y.; E. C. Hilborn, Valley City, N. D.

Vigilance—Richard P. White.

TO REVISE STANDARDS.

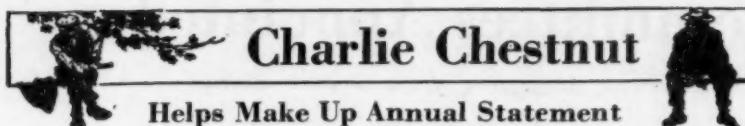
The committee on standardization of grades of the American Association of Nurserymen, under Chairman William Flemer, Jr., is actively preparing for a revision of the standards as published in 1936. After consultation with Secretary R. P. White and also with Wilbur Simonson, senior landscape architect of the bureau of roads, at Washington, a questionnaire was sent out to members of the association to obtain preliminary information on which to base the revision.

WHITE TO VISIT WEST.

Richard P. White, executive secretary of the American Association of Nurserymen, is expected to appear before the California Nurserymen's Association convention at Hollywood at the end of this month and then make a trip up the coast to meet other trade groups.

He is announced as the principal speaker at a meeting of the Oregon Association of Nurserymen to be held October 6 at the Multnomah hotel, Portland. The program of that meeting calls for a session of the advisory board at 9:30 a. m. and a regular business session of the association at 10:30. An afternoon program is in preparation.

Next day, October 7, Mr. White is to appear at a meeting of the Washington State Nurserymen's Association to be held at Seattle.



Charlie Chestnut

Helps Make Up Annual Statement

"Here is a letter from the bank," I says to Emil. "They want you should make a payment on your morgage on the 1st and, furthermore, they want you to file your annual statement again. The bank auditors demand it, they say."

"Well, we will have to go to work and make up a lot of figgers or they wont be satisfied," Emil said. "Take the blank there and read off all it says and I'll give you different figgers to put in."

So I begun to read. "First State Bank, Riverbend, Illinois, Jacob Cheeter, Pres."

"Hell, dont read all that stuff, just begin on the first blank," says Emil.

"All right" I says, "name of corporation or firm."

"Go on, go on, read the lines where you put in the figgers," he said.

"Well, the first line is Cash on Hand," I read.

"Put down \$20," says Emil.

"Where do you get that figger," I said. "You aint got \$20 in that cash box if that was what you was figgerin on. Your wife took that last April to make a payment on her washing machine and you aint never put it back."

"Well, put it down anyway," Emil said. "We always put \$20 down every year so there aint no use to change that."

"O.K. \$20 on hand," I says. "Second line is Cash in Bank. There aint no use to be careless with your figgers on that," I says. "That is one place where the bank can catch you up. All they got to do is look in their book to tell where you are at on that bank balance."

"Let's see," Emil said, "put down \$178.50."

"Wait a minute," I says, "that was what you had this a. m. before you paid that payment on the truck. Now you only got \$145.28."

"Put down \$178.50 and dont argue," he says. "You can date this as of yesterday."

"Well," I says, "if you are going to move dates around why dont you date it last April 28 when you put in that check for \$825 from Mrs.

Brewster, that was the most you had in since I remember," I says.

"Go on, read the next line and cut out the noncents," Emil said.

"O.K." I said, "the next line is Accounts Receivable (good). They only want the good ones," I said.

"Hell there all good, only some is slow" he said.

"You aint going to put that one in for the Acme Real Estate Sub-Division are you?" I says. "You said yourself you kissed that goodby 3 years ago."

"Its still Accts. Rec.," he says, "and its \$600.00. All the nurseries puts in their old accts. that way. You cant tell it might pay out."

"Anyway I'd hate to offer you 10c on the dollar on that one," I says. "Then theres that acct against the Boosters Club of Lake Park, \$410 for them soft maples you put in the park. That'll be 4 years old this fall and the club folded up a long time ago."

"Well, my gosh," Emil said, "that's only frozen assets. When

times picks up I aim to collect that in full."

"How about that account for Worldwide Landscape Co.?" I says. "That's 2 years since he paid that last \$2 on acct."

"Oh thats good," Emil said. "I see Johnson last spring and he said dont worry, if the slaughter house opens this fall he might get a job and he would send \$2 per week."

"I call it doubtful," I says.

"I dont care what you call it" said Emil, "you do the riting and I'll give you the figgers."

"O.K.," I says, "what is the figger for Accts. Rec."

"\$3,895.10 I made it," says Emil. "Read the next line."

"O.K.," I says, "The next line is Notes Rec."

"Let's see," says Emil, "they is 2 notes same as last year, Gem Nursery Co. \$400 and F. & M. Nursery \$250. Put it down," he says, "\$650."

"Wait a minute, Emil," I said, "them notes is so old that you could sell em for antiques."

"Come to think of it, you can add interest to them notes," Emil said. "Let's see, make that Gem Nurs. note \$650 and F. & M. \$400. That will look better to the bank," he said. "Notes Receivable \$1,050.00."

FOREST NURSERY COMPANY

INCORPORATED

J. R. Boyd, Pres.

McMINNVILLE, TENN.

See our advertisement in the August 15th issue of this paper for prices on PEACH SEEDS, Tennessee Natural Screened Seeds or Large Budded Seed.

Samples free on request.

Also see advertisement in same issue for prices and sizes on BUXUS SEMPERVIRENS and BUXUS SUFFRUTICOSA, Old English Dwarf Boxwood.

Better cover your wants on this stock at prices quoted. Orders booked now can be used any time up to December 1st.

Write for Fall Trade List and send your want list for special quotations before you buy.

"The bank knows that the old Gem outfit is practically out," I says. "The old man died 7 years ago and his woman that runs it is almost blind."

"Say," Emil said, "you dont catch on that this is the way a statement is always made up. Do you suppose the bank wants the auditors to look at that line and all they see is nothing. Nothing at all for Notes Rec. wouldn't look right," says Emil. "Read the next line."

"Next line is investments outside the business," I read.

"Well theres that stock in the cemetery at Lake Park. Put down \$1,000 for that," he says.

"Remember what that banker in Lake Park told you, Emil? He said that stock wasn't worth the paper it was written on. He said they only sold 7 lots and the farmer that sold the land was plowing most of it up again and putting it into corn."

"Well, I took 2 lots in good faith in exchange for Norway spruces and I figger them lots are worth at least what I paid for them, if not more. Then theres them shares I bot in the Riverbend Shoe Factory. \$500 I give for em too, in 5 payments. They was going to double the population of Riverbend in no time, but nothing happened. The machinery is still there under a padlock just as the sheriff locked it up two years ago. I'll bet the bank wont say nothing about that on the statement as old man Cheeter at the bank is the one that talked me into it."

"Anything else," I says, "to go in on this line? How about them lots at Snag Lake? Remember you took two lots at \$350 each in trade for them shrubs, but since the dam went out there the lake disappeared and now the farmer wont let you go accross his land."

"We'll leave that off for now," Emil said. "We may put them lots in if we need to make the statement look better. Put down \$1,500 for investments and read the next line."

"All right, Real Estate owned, acreage and estimated value," I read.

"Well," Emil said, "the home piece is 25 acres, \$12,500, and the piece by the Ry. tracks 4 1/2 acres, \$4,500, total \$17,000, mortgage \$9,000, net worth \$8,000."

"Funny the bank never calls you on that valuation," I says. "You can buy that place right next to the nursery from Mrs. Murphy, 20 acres for

"PAINESVILLE NURSERIES"



This is our 84th consecutive year.

We grow things
in QUANTITY;
of well proved
QUALITY.

See Our Catalogues

Our prices are right.

Fruit Trees
Deciduous Trees
Evergreen Trees
Shrubs
Vines
Evergreen Shrubs
Roses
Small Fruits
Hardy Perennials
Greenhouse and
Bedding Plants
Bulbs and Tubers
SEEDS

Complete Nursery Supply

The Storrs & Harrison Company

PAINESVILLE, OHIO

\$2,000 and if you tried to sell this outfit you couldn't get a dime over the face of that morgage. In fact, Emil," I said—

"Oh dry up," he says, "you aint no real estate expert. Read the next line."

"Next line is merchandise on hand," I said.

"Here is where we can make a showing," Emil said. "Put down \$20,000. Wait a minute, better make it \$23,500 so it will look better to the bank than last year."

"Aint you high on that?" I says. "You was telling the assessor just yesterday that the nursery stock wasnt worth a buffalo nickel; in fact, you said it was a liability."

Emil give me one of his most sour looks. "Charley," he says, "sometimes I wonder how I stand it to have you around when you dont ever catch on to business. Get this straight," he says, "and dont never forget that a tax assessor is one thing and a bank state-

BAY STATE NURSERIES

INCORPORATED
NORTH ABINGTON, MASS.

— OFFER —

A GENERAL LINE OF NURSERY STOCK AT
COMPETITIVE WHOLESALE PRICES.

SPECIALIZING IN
TAXUS, AZALEAS, RHODODENDRONS
AND ODD ITEMS YOU ARE UNABLE
TO OBTAIN ELSEWHERE.

Ask for Our Price List

ment is another thing and neither one of em means a dam thing. Read the next line," he says.

"Other assets," I read. "What do you want down on that?"

"There's a lot goes in on that," he says. "Jot these items down as I read em off, a tractor, 2 trucks, 2 horses, harness, wagons, tools, etc. Call it \$5,000."

"That's a lot more than you paid for

that junk," I says, "and besides most of it is all worn out and fallin apart."

"Charley," he says, "how can you make a statement which will please the bank and the auditors if you don't put a good value on your 'stuff'? Prices on tools and equipment has gone up in the last year or two and I figger some of the stuff is worth more than we paid for it. Then put 'etc.' on there so they can see there is other stuff too numerous to mention."

"That's all in the first column," I says.

"Well, add it up and see what you get."

"Comes to \$28,643.60," I says.

"Let that go for now," Emil says, "I can always add in a few thousand for good will if we need it to balance up. But the bank says the boys aint puttin in so much for good will unless we need it to balance the liabilities. We'll come to that." Emil took time out to light his pipe and then he says, "Start on the other column."

"O.K." I says, "Liabilities—"

"Ought to put you down first in that column," he says like he thot it was funny. But I didnt say nothin.

"First line is Accts. Payable," I says.

"I aint going to put down that Red River Who. Nursery acct.," Emil said. "That stuff was undersize and oversize and lopsided and all around no account stuff that I aint going to pay a dime till I get a adjustment. Then there's that car of shade trees I bot. I told old Ed at the convention he would have to take it out in Norway spruce and when he finds out I aint going to be in shape to pay cash he'll be glad to take the Norways. There is a lot of odds and ends of bills and statements in that drawer but I aint had time to look em over. I dont think it runs over \$2,000, but call it \$1,977.50 so it will look like we added everything in."

"How about Notes Payable," I says.

"Well there's that note for \$300 on them hawthornes I bought for the State Highway job. Better put that in I suppose. That's a hangover from last year, but the bank wont notice it."

"What's next?" Emil said. "I'm gettin tired of so much figgerin."

"Other obligations," I read.

"Morgage to the Riverbend Bank \$9,000. Put that down," Emil said.

"O.K., what else?" I said.

"Well there's them payments on the truck and 3 more installments on the greenhouse, total \$800."

"Don't forget you owe me for 3 weeks pay," I said.

"Skip that," Emil said. "Add it up and see what you get."

"\$12,077.50" I says.

I filled in the bottom of the sheet:

Total assets \$28,643.60

Total liabilities 12,077.50

Net worth \$16,566.10

I handed it to Emil. "Total net worth \$16,566.10," he read out loud. "That's as good a statement as any nursery could show. I'll take it down to the bank in the morning," he said, and walked out.

"Wonder what it would look like if you took the air out of it," I says to myself so I added her up again.

ASSETS

Cash \$ 145.28

Accts. Rec. (good) 1,100.00

Notes None

Other investments None

Value of nursery stock None

Equity on land None

Equipment 200.00

Total assets \$1,445.28

LIABILITIES

Accounts payable \$3,000.00

Notes payable 300.00

Total liabilities 3,300.00

Assets 1,445.28

Net Worth—Minus—\$1,854.72

I carried them figgers around in my pocket for a week. I didn't have the heart to show em to Emil. After all, I says, he's in the same boat with a lot of other nurserymen and why rock the boat?

OREGON ROSE TESTS.

According to the newsletter to nurserymen from the Oregon department of agriculture, the experiments that proved so successful with the cold storage of rose plants have met with difficulties. In consequence a warning is issued to nurserymen to go slow in making any large-scale plans for cold storage until the difficulty can be traced and eliminated. The roses from cold storage, for no particular reason, do not seem to grow so well as those kept in common storage. Every effort is being made by department research men to trace the cause of the poor growth. Whether the particular varieties used are not adaptable to cold storage, or whether the storage as conducted would be unfavorable to all varieties, is hoped to be determined during the year.

However, the gas defoliation of roses as reported on last fall has proved

TAXUS CUSPIDATA CAPITATA UPRIGHT YEW



Orders filled with fine, bushy stock like those shown in photograph.

TAXUS TALENTS:

Rich, dark green. Hardy. Transplants easily.

For Hedges. For Specimens. For Foundation Plantings.
Shears to any form. An excellent Topiary subject.

Priced Right—Send for quotations.

Carload and truckload lots are economical.

**BOBBINK & ATKINS RUTHERFORD
NURSERYMEN SINCE 1898 NEW JERSEY**

We grow hundreds of other items, too.

SHADE TREES

Offered for Fall '38 or Spring '39 at the following Low Prices: Per 10 Per 100

Jap. Cherry (Kwanzan) \$11.00 \$100.00

5 to 6 ft. 8.50 75.00

10 to 12 ft. 10.00 90.00

1 1/2 to 2 1/2 in. Cal. 12.50 115.00

2 to 2 1/2 in. Cal. 17.50 165.00

Norway Maple 8 to 10 ft. 12.50 115.00

10 to 12 ft. 15.00 135.00

Schwedler's Maple 8 to 10 ft. 12.50 115.00

10 to 12 ft. 15.00 135.00

Pin Oak 2 to 2 1/2 in. Cal. 20.00 175.00

Oriental Plane 8 to 10 ft. 10.00 90.00

10 to 12 ft. 12.50 115.00

Carolina Poplar 8 to 10 ft. 4.50 40.00

Lombardy Poplar 8 to 10 ft. 3.00 22.50

Weeping Willow 6 to 8 ft. 6.00 50.00

Other sizes and varieties of Shade Stock quoted on request.

WAYNESBORO NURSERIES, INC.
Waynesboro, Virginia

Our Specialty
LINING-OUT
STOCK

HESS' NURSERIES
Mountain View, New Jersey

We specialize in
APPLE AND PEACH TREES
Strawberry, Asparagus, Raspberry and
Blackberry plants.
Grapevines, 1 and 2-year.

OUR MANY YEARS' PRODUCTION
EXPERIENCE COMBINED WITH OUR
FAVORABLE LOCATION ENABLES
US TO OFFER STOCK THAT MUST
PLEASE AT PRICES YOU WILL APPRE-
CIATE.

Submit your definite list for quotations.

BOUNTIFUL RIDGE NURSERIES
Princess Anne, Md.

THE WESTMINSTER NURSERIES
WESTMINSTER, MARYLAND

Fruit and Shade Trees. Evergreens. Shrubbery, all sizes up to 7 ft. California Privet, 8 to 7 ft., in grade. Heather, assorted, 8 to 18-in. clumps. Evergreen Privet and Barberry. Perennials, etc.

We have a very complete line.
Trade list sent on request.

KOSTER COMPANY, INC.

JUNIPERUS STRICTA 100 1000

4 to 6 ins., 1-yr. tpi. \$0.10 \$0.08

6 to 9 ins., 2-yr. tpi. .18 .15

RHODODENDRONS, Named Hybrids

18 to 24 ins., B & B. \$2.00 \$1.75

2 to 2 1/2 ft., B & B. .25 .25

BRIDGETON, N. J. Write for catalogues

successful. The use of both synthetic ethylene gas and that obtained from the presence of ripening fruit was used, and no apparent difference in results has been noticed. The defoliation usually takes four days to complete. All rose plants defoliated in this manner have grown and bloomed well this spring.

OREGON LICENSES ISSUED.

The number of different types of nursery licenses issued by the Oregon department of agriculture for 1937-38 were recently tabulated and released by the bureau of nursery service. Growers paying \$15 or more numbered 318, while growers occupying less than one-half acre, paying \$5, numbered 460. Dealers paying \$15 and having sales of over \$300 totaled eighty-eight, while dealers paying \$5 and having sales of less than \$300 totaled 346. Sixty licenses were issued to berry growers and thirty-five to agents.

The total license account receipts were \$13,408.36.

RIPENING FRUIT DEFOLIATES HOLLY.

That the presence of ripening fruit near growing plants or cut foliage, such as holly, may cause quick dropping of leaves has been conclusively proved in research being carried on at Oregon State College by Elmer Hansen and Henry Hartman.

The findings are so revolutionary in character that they may lead to drastic changes in nursery practice as well as in handling of ornamental plants, either on a commercial or consumer basis.

Common fruits which ripen off the tree, particularly apples and pears, give off considerable quantities of ethylene gas. Previous studies made by Hartman and Hansen had definitely established this fact and had shown that the presence of ripening fruit in a storage room would cause green fruit to mature much more rapidly than normal.

Tests indicate that the gas has little or no effect at temperatures lower than 45 to 50 degrees Fahrenheit.

WHERE strawberry root weevils are a serious menace to conifer plantings in nurseries, a general baiting program seems advisable each year.

HICKS' YEW

(*Taxus cuspidata hicksii*)

Hardy, resistant to city conditions, fast growing, with lustrous dark green needles. Hicks' Yew is equally valuable as a specimen or hedge plant. More columnar than Hatfield Yew, never leggy like Capitata, it is undoubtedly the finest of the more than twenty named varieties we are growing. At these prices, you cannot afford to miss the opportunity of lining out a block. WHILE THEY LAST.

Inches	10 to 99	100 Up
3 to 6	T	\$0.10 \$0.06
6 to 9	TT	.15 .12 1/2
9 to 12	TTT	.17 1/2 .14
12 to 15	TTT	.20 .16
15 to 18	TTT	.65 .50
18 to 24	TTT	1.00 .75
24 to 30	TTT	1.65 1.25
30 to 36	TTT	2.50 2.00

All Orders C. O. D.

Four Winds Farm Nursery, Inc.

4190 Main Street
Eggertsville, New York

Jackson & Perkins
Company

Wholesale Nurseries

NEWARK
NEW YORK STATE

CANADIAN HEMLOCKS

Sheared, transplanted and bushy

2 to 6 1/2 feet

Truckload lots or less

SPRINGDALE NURSERY

H. C. Beardley Montour Falls, N. Y.

PRINCETON NURSERIES

of PRINCETON, N. J.

SUPERIOR

Hardy Ornamentals

PRIVET and BERBERIS

Splendid Stock

Write for Special Quotations

LESTER C. LOVETT

Milford Delaware

For list of

BOOKS ON TRADE SUBJECTS

Write to

AMERICAN NURSERYMAN

Coming Events

CONVENTION CALENDAR.

September 7 and 8, Texas Association of Nurserymen, annual meeting, Driskell hotel, Austin.

September 12 and 13, Northern Nut Growers' Association, annual meeting, Horticultural hall, Boston, Mass.

September 15 and 16, American Rose Society, annual meeting, Community inn, Hershey, Pa.

September 28 to 30, California Nurserymen's Association, annual meeting, Hotel Roosevelt, Hollywood.

September 30 to October 2, annual Texas rose festival, Tyler.

October 6, Oregon Association of Nurserymen, Multnomah hotel, Portland.

October 7, Washington State Nurserymen's Association, Seattle.

TEXAS PROGRAM.

The program for the annual meeting of the Texas Association of Nurserymen, to be held at Austin, September 7 and 8, has been announced by Harvey Mosty, secretary, as follows:

SEPTEMBER 7, 10 A. M.
Invocation by J. M. Thompson, Waco.
Reports of the president, secretary-treasurer and committees.

Appointment of special committees.
"New Texas Truck Law," by a representative of the Merchants' and Manufacturers' Association, Austin.

Report of A. A. N. activities, by E. L. Baker, Fort Worth.

SEPTEMBER 7, 2 P. M.
School of landscape design, conducted by Willard C. King, San Antonio.
"Salesmanship and Modern Business Methods," by G. T. Atkins, advertising and business manager, American Statesman, Austin.

SEPTEMBER 7, 6 P. M.
Barbecue, Howard's Montopolis Nursery, Austin.
SEPTEMBER 8, 9:30 A. M.
"Trade Barriers," by J. Frank Sneed, Oklahoma City, Okla.
"New Nursery Inspection Law for Texas," by J. M. Del Curto and Walter T. McKay, Austin.

SEPTEMBER 8, 1:30 P. M.
"Governmental Nurseries," by G. E. Maxon, Vernon.
Open forum. Discussion of grievances, landscaping done by employees of tax-supported institutions and methods to eliminate such competition.

Reports of special committees.
Election of officers.
The climax of Wednesday's program will be an old-fashioned western-style barbecue, held on the grounds of Howard's Montopolis Nursery, Austin. The meats served will be chevon, mutton and beef, all of which will be barbecued on the grounds in open pits in true western style. The entertainment will include western-style dancing for those who care to enjoy it. There will be no charge of any kind for this feature of the meeting.

CALIFORNIA MEETING.

The leading topic for discussion at the annual meeting of the California Association of Nurserymen, in conjunction with kindred trade co-operatives, at the Hotel Roosevelt, Hollywood, September 28 to 30, has been announced as the state grades and standards law, covering all classes of nursery stock. The topic will be discussed as to its administration, inspection and enforcement, rose plants and ornamentals, fruit tree grades, graded stock in orchard plantings, standards and the florists' trade and opinions of amateur horticulturists. These discussions will be supplemented by the special committee re-

port covering desirable amendments to the law, according to the notice sent out by Secretary Henry W. Kruckeberg, Los Angeles.

ROSE SOCIETY MEETING.

The annual meeting of the American Rose Society will be held at Harrisburg and Hershey, Pa., September 15 and 16. There will be a dedication of the new Harrisburg municipal rose garden on the morning of the first day, and in the afternoon a visit to Dr. McFarland's garden at Breeze Hill, Harrisburg, after which members will go to Hershey, where there will be a formal dedication of the Hershey rose garden. The annual dinner will be held that evening at the Hotel Hershey, where prominent speakers will be heard after dinner.

The annual business meeting of the society will be held in the Hershey community building on the morning of September 16, and the principal speaker at the meeting will be Miss Cynthia Westcott, the "plant doctor." After the business meeting the members will be taken on a tour of Hershey and shown through the factory, the industrial school and other places of interest.

R. Marion Hatton, Sec'y.

NUT GROWERS TO MEET.

The Northern Nut Growers' Association will hold its twenty-ninth annual meeting, September 12 and 13, at Horticultural hall, Boston, visiting the Arnold Arboretum, Cambridge, Mass., and the Waltham field station.

Talks by prominent speakers have been arranged for three sessions, according to Ray Koon, Waltham, of the general arrangements committee.

The morning session on the first day, September 12, will be held at Horticultural hall, Boston, and will adjourn at noon for a picnic lunch on grounds adjoining the Arnold Arboretum. At 1:30 p. m. a conducted tour of the Arnold Arboretum will be held. The evening meeting will be resumed at Horticultural hall.

The second day of the meeting, September 13, will open at Horticultural hall and will continue until 2:30 p. m., at which time the field station of the Massachusetts State College, at Waltham, will be the scene of the remainder of the day's meeting.

Present officers of the association are: President, J. F. Wilkinson, Rockport,

AMERICAN NURSERYMAN

Ind.; vice-president, Dr. A. S. Colby, Urbana, Ill.; treasurer, C. F. Walker, Cleveland, O., and secretary, G. L. Slate, Geneva, N. Y.

MOUNT ARBOR OPENS BRANCH.

E. S. Welch, president of the Mount Arbor Nurseries, Shenandoah, Ia., has just announced the opening of an eastern branch, room 304, Painesville National Bank building, Painesville, O., with Howard S. Chard as manager.

For many years, Mr. Welch has conducted growing operations in Lake county, Ohio; western New York, and southern Michigan. In order better to serve the many eastern customers of the Mount Arbor Nurseries and to direct their other activities in the east, it seemed that an eastern branch was essential and that Painesville was the logical location for it.

Howard Chard was connected with the Storrs & Harrison Co., Painesville, for twenty-four years, the past several years as secretary and sales manager. He is a past president of both the Ohio



Howard S. Chard.

state and the Lake county nurserymen's associations and the Ornamental Growers' Association. He has been active in the American Association of Nurserymen and served on the executive committee.

Mr. Chard will continue as a member of the executive committee of both the Ohio state and Lake county nurserymen's associations and on the standardization committee of the A. A. N.

While other nurseries have opened temporary sales offices and distributing

 Ask for WHOLESALE CATALOGUE
1300 VARIETIES
IRIS AND PEONIES
QUALITY!
C. F. WASSENBERG - Van Wert, O.

DAPHNE CNEORUM

Well sheared stock for
Fall Shipment.
Write for list.

EDEN NURSERIES, Eden, New York
18 miles south of Buffalo on Erie R. R.
and U. S. Route 62.

PEONIES
All types, including Tree Peonies
The Cottage Gardens
Lansing, Mich.

PROFITABLE PEONIES

Best varieties. Attractive prices. Fine
quality roots, liberally graded.

27th Annual Catalogue ready.

HARMEL PEONY COMPANY
Growers of Fine Peonies since 1911
Berlin, Maryland

EVERGREENS

Lining-out stock

Pfitzer's Juniper

Rooted cuttings

1-year-old

2-year-old

Grafted plants

1-year-old

2-year-old

Biota orientalis compacta

Seedlings and transplanted

ALSO READY STOCK FOR
LANDSCAPING in all sizes.

Ask for complete wholesale price list.

**THE PAUL OFFENBERG
NURSERY CO.**

1988 E. Livingston Ave.
Columbus, O.

Red Barberry Seedlings

Grade	100	1000	5000
1 to 3 ins.....	\$1.50	\$12.50	\$50.00
3 to 6 ins.....	2.25	18.00	75.00
6 to 9 ins.....	3.00	23.50	100.00
T 9 to 12 ins.	8.50	75.00

Prices subject to change without
notice.

Fairview Evergreen Nurseries
Fairview, Erie Co., Pa.

Blue, White and Norway

SPRUCE

Liners

Sizes from 2 to 4 years.

I. C. PATTON Shepherd, Mich.

CHIEF and LATHAM RASPBERRIES RED LAKE CURRANT

Hardy Fruit Tree Seedlings
Americana Plum Manchurian Crab

ANDREWS NURSERY CO. Faribault
Minn.

SMALL FRUIT PLANTS

Evergreens — Shrubs
Lining-out Stock

Send for Complete Trade List

SCARFF'S NURSERIES
New Carlisle, O.

Wholesale Growers of

Grapevines, Currants,
Gooseberries, Blackberries
and Raspberries

Let us quote on your requirements

FOSTER NURSERY COMPANY, INC.
69 Orchard St. Fredonia, N. Y.

points during the selling season, it is believed this is the first wholesale nursery to establish a permanent branch office to direct all the activities of the parent firm in a given area. This is a common practice in other industries, but it is really an innovation in the nursery business, the first acceptance of mass production and mass distribution through intensively organized branches.

GRAVES JOINS WYMAN FIRM.

George Graves, who for the past few years has been in charge of the nursery culture department at the Waltham field station of the Massachusetts State College, is leaving that institution to join the Framingham Nurseries, being succeeded at Waltham by H. S. Tiffany, who has been assistant to Mr. Graves for some time. The Framingham Nurseries, at Framingham, Mass., are operated by Richard M. Wyman. For several years they were incorporated with the Bay State Nurseries, but have lately been operated independently. The Bay State Nurseries, at North Abington, Mass., now operate as a separate unit, under the management of Donald B. Wyman.

WHITE-FRINGED BEETLE BAN?

A public hearing to consider a federal quarantine because of white-fringed beetle infestations in Alabama, Florida, Louisiana and Mississippi has been announced by Secretary of Agriculture Wallace. The hearing will be in courtroom 206 in the Post Office building, New Orleans, La., at 10 a. m., September 15. The white-fringed beetle, known to occur in South America, has become established in several areas in the four southern states, where an extensive survey in the current season has resulted in new findings.

The notice of the hearing includes the following:

"The Secretary of Agriculture has information that the white-fringed beetle, *Naupactus leucoloma* Boh., an insect pest dangerous to agriculture and not heretofore widely prevalent or distributed within and throughout the United States, exists in the states of Alabama, Florida, Louisiana and Mississippi, and that a closely related species of *Naupactus* exists in the state of Mississippi.

"It appears necessary, therefore, to consider the advisability of quarantining the states of Alabama, Florida, Louisiana and Mississippi, and of restricting or prohibiting the movement from these states, or regulated portions thereof, of the following articles: (1) Soil as such or in connection with nursery stock, plants or other products, articles or things, and (2) farm products and such other articles as may be deemed necessary to prevent the dissemination of these insects in any stage of development."

J. FRANKLIN BRADLEY, landscape contractor and nurseryman, Syosset, N. Y., has purchased four acres of woodland and part of the Voorhees farm located on Cold Spring road, Syosset.

WAYNESBORO NURSERIES, INC., Waynesboro, Va., of which E. M. Quillen is president, has amended its corporate charter and has reduced its maximum authorized capital stock from \$150,000 to \$75,000.

TAXUS

Taxus cuspidata, propagated from cuttings of the improved dark green strain.

XX B&B 15 to 18 ins., heavy, from beds, ideal for dwarf hedges.

\$60.00 per 100, \$55.00 per 1000.

	Each
XXX B&B 18 to 24 ins.	\$1.25
18 to 24 ins., heavy	1.50
2 to 2½ ft.	2.00

Juniperus Depressa Plumosa

	Each
XXX B&B 18 to 24 ins.	\$1.25

Juniperus Chinensis Pfitzeriana

	Each
18 to 24 ins.	\$1.50
2 to 2½ ft.	1.75
2½ to 3 ft.	2.25

Above prices in lots of 100, f.o.b. Cincinnati.

We also have larger Taxus, including trimmed specimens up to 4 and 5 ft. high. Taxus headquarters—over 100,000 plants.

THE W. A. NATORP COMPANY
Cincinnati, Ohio

Hardy Phloxes

Finest varieties, field-grown and true to name.

Oriental Poppies

Twenty varieties, field-grown, propagated from divisions.

Hemerocallis

Several of the newer varieties.

Evergreens for Lining Out

Well established in 2-inch pots. Reasonable prices. Send for list.

HARMON NURSERY
Prospect, Ohio

MOERHEIM'S SPRUCE

Heavy Specimens, 6 to 10 ft.

NORWAY SPRUCE

Up to 14 ft. 6 to 8-ft. diameter.

MAGNOLIAS

6 to 10 ft.

Ashi-Beni Jap. Maple, Hall's

Honeysuckle, Bittersweet, Sumacs

FREMONT NURSERY Fremont, O.

WHOLESALE GROWERS

Specializing in
Evergreen Seedlings
Transplants and Apple Trees

Write for price list.

Send us your trade list.

MATHEWS EGERT NURSERY
North Muskegon, Mich.

ENGLISH BOXWOOD

Plants 6 ins. to 20 ins. Largest grower of English boxwood in the south.

Write for wholesale price list.

F. L. JOHNSON, Mount Airy, N. C.

Please Mention
THE AMERICAN NURSERYMAN
when writing advertisers

Summer Meetings

OHIO SUMMER MEETING.

More than 100 nurserymen attended the summer meeting of the Ohio Nurserymen's Association at Painesville, August 17.

Wilber Siebenthaler, secretary and treasurer, opened the meeting with a report of the financial condition of the association, stating that the treasury contains a sizable balance. D. Barrett Cole, president, who presided at the meeting, gave a brief talk telling of the accomplishments in tax reductions by the association.

Stating that the farm forestry bill enabled the forestry service to raise all kinds of stock which it would give to the farmers, then show them how to cultivate and sell it, Benjamin J. Greening, of the Greening Nursery Co., Monroe, Mich., gave a strong argument against the bill. Mr. Greening urged that nurserymen use the power of their organizations to fight this bill.

Walter J. Marion, chief inspector of the state department of agriculture, urged all nurserymen to support their associations, which would make it easy for them to procure favorable legislation.

Lawrence Brick, president of the Lake County Nurserymen's Association, and John Baringer, district nursery inspector, closed the business meeting with brief talks. Mr. Brick said that he hoped the Ohio and national associations would look to the Lake county organization as a leader and lawmaker, while Mr. Baringer offered the assistance of his department in the legislative attempts of the nurserymen.

The evening, which was devoted entirely to entertainment, began with the introduction of distinguished visitors and a varied musical program.

WISCONSIN MEETING.

Twenty-five nurserymen gathered at the nursery of the Holton & Hunkel Co., Milwaukee, Wis., for the summer meeting and picnic of the Wisconsin Nurserymen's Association August 18. Most of them brought their families, and all enjoyed refreshments furnished by Ed. Hunkel. The early part of the day was spent in games and discussions.

E. L. Chambers, state entomologist, took time off from his duties at the Wisconsin state fair to attend the meeting and to show specimens of the white-fringed beetle, Japanese beetle and creeping Jennie, a new weed that is invading nurseries.

At the short business meeting held in the afternoon, H. J. Rahmlow, of the Wisconsin Horticultural Society, discussed the possibilities of color photography as a means of assembling a collection of colored slides for nurserymen to show at garden club gatherings.

After Mr. Rahmlow's discussion, H. W. Riggert, secretary, read the minutes of the previous meeting, and a short discussion as to details of the winter meeting and means of obtaining new members followed.

The assessing of nursery stock still in the ground brought out considerable criticism from several of the members, who pointed out that the risk of losing the stock from winterkill, fire, wind or a number of the other hazards of grow-

ing stock made this method of assessment unfair.

Remarks were heard of the slowing up of business because of the inability to reach the farmers, who, because of an unusual amount of wet weather, have just recently been able to complete harvesting of their crops. However, the opinion was expressed that once the harvest has been cared for and the farmers became accessible, sales will pick up.

Present officers of the association are: President, T. A. Singer, of Singer Bros., Milwaukee; vice-president, Willard Dustrude, White Elm Nursery, Hartland; secretary and treasurer, H. W. Riggert, of Coe, Converse & Edwards Co., Fort Atkinson.

James Livingstone and Ed. Hunkel, of Holton & Hunkel Co., acted as hosts for the day, and they kept busy seeing that all those present enjoyed themselves. Most of those present commented on the fine blocks of evergreens seen along the road, which led through a considerable portion of the nursery, as they drove to the picnic grounds located in the rear.

KENTUCKY MEETING.

The summer meeting of the Kentucky State Nurserymen's Association was held August 15 and 16 at Butler park, Carrollton, Ky. About 100 were present. The entire group met at the nursery of Robert Martin, Carrollton, and from there they went to Butler park for the picnic. Mr. Martin, who had charge of arrangements, had a chicken and ham dinner ready, which was served in picnic style. The entire day was spent in visiting, swimming and other sports.

After the picnic the group adjourned to the Riverside Inn, on the outskirts of Carrollton, for the evening meeting and banquet. The entertainment for the evening was concluded with a dance.

The second day, August 16, included a tour of Warsaw and Sparta, including Martin's Nursery, Donaldson Nurseries, Willadean Nurseries and a highway landscape project on U. S. highway 42. After the tour luncheon was served at the Phoenix hotel, Warsaw.

The members of the committee in charge of arrangements were: Alvin Kidwell, chairman; Robert Martin, and H. G. Tilson, Lexington.

WASHINGTON STATE MEETING.

The monthly meeting of the Washington State Nurserymen's Association was held August 25 in room 302 of the County-City building, at Seattle.

The appointment of a half-dozen vice-presidents to represent various localities of the state is expected to result in the formation of representative local groups for the better organization of Washington nurserymen.

NEW JERSEY CO-OPERATION.

William P. Howe, Jr., Pennington, N. J., vice-president of the New Jersey Association of Nurserymen, represented the trade when Robert T. Bowman, president of the New Jersey State Chamber of Commerce, was host at his Spring lake summer home, August 24, to prominent New Jersey agricultural leaders. He pledged the coöperation of his organization in the promotion and sale of New Jersey farm products through better packaging, standardization and labeling.

The Reynolds Nursery Co., Winston-Salem, N. C., was granted a permit July 20 to erect a \$1,000 office building at a corner of First street and Park circle.

H. J. TAMKE, Pawtucket, R. I., has been incorporated to conduct a nursery and landscape business, with authorized capital of 100 shares of common stock, no par value. The incorporators are Harold A. Andrews, Roger T. Clapp and Noel M. Field, all of Providence.

Just Out!

ROSES OF THE WORLD IN COLOR

266 illustrations in full color! No such showing of roses in accurate color has ever before been made. The printing is superbly done and the color checked by actual comparison with the roses as they bloom in the author's own garden, where nearly 800 varieties of the world's best roses have been grown. There are 58 other pictures in black and white, and the index contains 557 descriptions.

By J. HORACE McFARLAND

President emeritus of the American Rose Society, editor of the American Rose Annual and author of several other books on roses. A master printer by profession, Dr. McFarland has developed accurate color printing to notable heights, and in this new book has applied with complete success the knowledge and experience he has gained in years of work with roses, with photography and with printing. The result is one of the most beautiful of recent garden books.

320 pages, bound in scarlet cloth, 6x9 inches

Price, \$3.75

For sale by

AMERICAN NURSERYMAN

508 S. Dearborn St.

Chicago, Ill.

EVERGREEN LINERS

Pfitzer's Juniper	{ Potted Transplants
Mugho Pine	{ Seedlings Transplants
Norway Spruce	{ Seedlings Transplants Grafting size
Pyramidal Arbor-vitae	{ Potted Transplants
Colorado Blue, White, Black Hills Spruce	{ Seedlings Transplants

Also offering a fine assortment of Shrubs, Shade Trees, Specimen Evergreens and Phlox. Write for special quantity prices.

SHERMAN NURSERY CO.
Charles City, Iowa

CHINESE ELMS

Our northern strain is very hardy, fast growing and makes few croches. About 20 per cent of our 2-year seedlings will make up 5 to 6 ft. This hardy type stands the winters here near the Minnesota line. About 30,000 2-year seedlings.

Also 1000 White Spruce, 2 to 4 ft. Very fine stock. All at bargain prices. Boxed free. Write for prices.

GRAETTINGER NURSERY
Graettinger, Iowa

MOUNT ARBOR NURSERIES
E. S. Welch Est. 1875 Shenandoah, Iowa

A COMPLETE LINE OF GENERAL NURSERY STOCK—ASK FOR TRADE LIST

Send us your WANT LIST for quotations
"One of America's Foremost Nurseries"

We will have
Assorted Apple and Peach Trees
for fall
on sale or possible exchange
BLOUNTVILLE NURSERIES, INC.
Blountville, Tenn.

JEWELL Wholesale
Hardy Minnesota-grown
Nursery Stock and Liners
THE JEWELL NURSERY CO.
POUCH N
Lake City, Minnesota


EVERGREENS
For Seventy-four years
growers of Quality Evergreens
Lining-out Stock a Specialty
Write for Trade List
EVERGREEN NURSERY CO.
Established 1864 : STURGEON BAY, WIS.

SOUTHERN CALIFORNIA NOTES.

Members of the board of directors of Horticultural Industries, Inc., met August 15, at the Taix restaurant, Los Angeles, Cal. A synopsis of the Supreme court decision upholding the constitutionality of the unfair practices act was read. This was received as good news by all members, inasmuch as the organization's structure is built around the act's provisions relating to sales below cost. The decision involved two cases relating to the sale of tobacco and groceries at prices admittedly less than cost. An adverse decision on these cases was given by the Third District Court of Appeals, in which doubt was cast on the constitutionality of the law, and the cases had been on appeal since February.

Everett Kuromoto, of Evergreen Nursery, Hollywood, told of the formation of the new Japanese Junior Nursery Association, sponsored by five or six prominent Japanese members of the Industries. The Junior group now numbers about thirty members, all of them American citizens and all interested in horticulture as their chosen vocation.

President Harold McFadden, Compton, and Vice-president H. A. Marks, Los Angeles, reported on the recent convention of the American Association of Nurserymen at Detroit, Mich., covering the subjects of cooperative farm forestry and wage and hour legislation. Mr. Marks made a strong appeal for support of the A. A. N.

It was reported that plans for the forthcoming Hollywood convention of the California Nurserymen's Association are progressing. Ladies of the Industries are making plans for hospitality for the guests.

Secretary Lou W. Johnson, Los Angeles, read a message broadcast by Commissioner Sam Leask, Jr., of the unemployment reserves board, warning that all employers should be registered.

In line with the series of articles on recommended items of nursery stocks now running in the American Nurseryman magazine, written by Prof. L. C. Chadwick, of Ohio State University, Columbus, it was suggested that a similar project here on the Pacific coast would prove of much value. The ensuing discussion brought strong support for the plan, and further development will be undertaken.

A meeting of the San Diego county members of Horticultural Industries, Inc., was held Saturday evening, August 20, at the Old Town Clubhouse, San Diego, with President McFadden, Secretary Johnson and H. J. Scherer, Long Beach, in attendance.

August 18, members of the Southern California Horticultural Institute, meeting at the Mayfair hotel, Los Angeles, heard Walter Armacost, head of the Armacost & Royston, Inc., speak on "Orchids." Mrs. Allee Patterson, Santa Monica florist, presented a demonstration of floral arrangements, using Armacost & Royston orchids. Hugh Evans, of the Evans & Reeves Nurseries, Los Angeles, presented a display of hibiscus.

Earl Lee Kelly, state director of public works, announced awarding of the contract for landscaping the California State building, at First street and Broadway, to Vido Kovacevich, Southgate, in the amount of \$7,450. Work is to begin immediately.

FALL 1938

ELM, American, Moline and Vase,
up to 4 ins. All transplants.

MAPLE, Norway, up to 3½ ins.
Transplants, extra select, spaced
7x7 ft.

POPLAR, Lombardy, up to 2 ins.

WILLOWS, Thurlow, up to 3 ins.

BARBERRY, Thunbergii, up to 2 to 3 ft.

SPIRAEA, Vanhouttei, up to 5 to 6 ft.

APPLE, 2-year.

CHERRY, 1-year.

PEACH.

All of above items can be supplied in carload lots.

Send for list on many other items.

C. M. HOBBS & SONS, INC.
Bridgeport, Indiana

Largest Nursery in Indiana. Est. 1875.

NOW IS THE TIME TO SELL COLORADO BLUE SPRUCE

Your customers will have good results with our POT-GROWN TREES.

2½-in., 10 to 12 ins. high.....	15c
3-in., 15 to 18 ins. high.....	25c
4-in., 20 to 24 ins. high.....	35c

Cash or c.o.d.

Rocky Mountain Evergreen Co.
Evergreen, Colo.

CHINESE ELM (*Ulmus Pumila*)

Hardy strain. Grown under irrigation. Good root system. Main leader to tip. No forks. Now booking orders for fall or spring delivery. Samples submitted on quantity orders. Prices on request.

SWINK NURSERY CO.
Box 152, Swink, Colo.

WHOLESALE GROWERS

of a complete line of Nursery Stock including Fruit Tree Seedlings.

Lake's Shenandoah Nurseries
Shenandoah, Ia.

VINES, 2-YEAR TRANSPLANTS

\$5.00 per 100, \$40.00 per 1000

Honeysuckle Halliana
Bignonia Radicans
Erythronium, Wintercreeper
Vitis Minor, Periwinkle

SCHNELL'S NURSERIES, Collinsville, Ill.

HILL'S EVERGREENS

Complete assortment of lining-out sizes
Also larger grades for landscaping
Send for our wholesale catalogue

D. HILL NURSERY CO.
EVERGREEN SPECIALISTS
Largest Growers in America
Box 402 DUNDEE, ILLINOIS

For list of
BOOKS ON TRADE SUBJECTS
Write to
AMERICAN NURSERYMAN

Gardeners' Convention

National Association of Gardeners Holds Three-day Meeting at Cleveland, Combining Tours and Sessions

Ideal weather favored the twenty-eighth annual convention of the National Association of Gardeners, held at the Hotel Hollenden, Cleveland, O., August 23 to 25. A good portion of the time was spent visiting private estates and parks, and the weather was sunny but cool. All branches of the organization were represented. The Cleveland branch acted as host and arranged a fine program of entertainment for the members and their ladies. R. B. Brydon, Cleveland Heights, was the general chairman. Luncheons and dinner tables were profusely decorated with choice blooms from private estates.

The new officers chosen are John Watts, Pleasantville, N. Y., president, and Frank T. Edington, Red Bank, N. J., vice-president. Treasurer Robert B. Brydon, Cleveland Heights, O., and secretary Dorothy E. Hansell, New York, were reelected. Two new trustees were elected: Anthony Sailor, Bernardsville, N. J., and Herbert W. Tickner, Yonkers, N. Y. The place of the next convention will be Buffalo, N. Y.

The first general business session was called to order at 2:30 p. m. Tuesday, August 23, the morning having been taken up with registration and board meetings. The first speaker was Hugo Varga, Cleveland parks director, who extended a welcome on behalf of Mayor Harold Burton, who was away on vacation. His subject was the development of the city's park system. He told about the difficulties encountered, such as the parks' having been neglected in former years and there being no division of architecture when he took office. Qualified men were hard to obtain, as the majority were employed by the government. This has been overcome and the department is now fully organized, with a staff of twenty-five. With the advent of W. P. A., 1,004 men had been put to work and this has grown to a present total of 13,000. Results are proving satisfactory, but the program is far from completed. He spoke of the cultural gardens in Rockefeller park, some of which have been completed and others under construction. Each garden is sponsored by a separate nationality group and is distinctly individual in treatment. The park department is installing walks which will connect all the gardens and plans are being made to dedicate them next spring. Other developments made and projected were dwelt upon.

Tells of State Experiments.

The next speaker was Dr. J. H. Gourley, chief of the department of horticulture and forestry of Ohio State University, Columbus. He expressed the opinion that the gardeners and experiment stations should coöperate or both will lose. He then gave a résumé of the early and present work being done by the experimental stations and pointed out how they can be of assistance to gardeners. Much interest is shown in the new system of growing plants in water, he continued, but caution should be observed. Progress is being made at the stations in this method and remarkable

results are obtained, but there is still much to be learned. Gardeners should not hesitate to take up their problems with the experiment stations.

An illustrated talk was then given by John Boddy, landscape architect for the state of Ohio, on "Roadside Improvement in Ohio." Protection of trees, soil-erosion preventives and general beautification were all touched on. He pointed out that billboards along the highways are a problem, as big industry is tied up with them, and the active coöperation of garden clubs and civic groups is necessary gradually to eliminate them and other unsightly objects.

Visit to Nela Park.

The remainder of the afternoon was spent in a trip to Nela Park of the General Electric Co., East Cleveland, where the grounds were inspected and a visit made to the Lighting Institute. L. C. Kent, director of the institute, welcomed the party. Dinner followed in the Nela cafeteria. The guest speaker was A. H. Alexander, city landscape architect, who spoke on how the city is being beautified and plans for the future. President Harold Graham gave his address, which had been postponed from the afternoon. He commented on the advancement in the general welfare of the association and the coöperative spirit prevailing among the membership. He thanked the directors, officers and chairmen of the branches for the fine work they had done. He expressed pleasure over the secretary's report, showing a gain of 165 members during the year.

He asked branch chairmen to endeavor to make their meetings as interesting as possible and urged members to take nonmembers to meetings and show them what is being done for their benefit. Also, he asked members to give suggestions to their chairmen. He re-

viewed the activities of the association during the past year and asked that the fullest support be given his successor. Dancing and entertainment rounded out the evening.

Wednesday's Events.

The Wednesday program started off with the past presidents' having breakfast together. At 9 a. m. the business session was called to order when reports were made and other matters attended to. There was only one address and this was made by Dr. H. C. Young, chief of the department of botany and plant pathology at Ohio agricultural experiment station, Wooster. He gave an interesting talk on what his department is doing along botanical lines. The afternoon was spent at the estate of E. S. Burke, Jr., Chagrin Falls, sight-seeing.

The annual banquet took place in the evening and was a festive affair. E. V. Newton, Cleveland, was toastmaster. Short addresses were made by Mrs. Florence M. Clegg, vice-president of the Federated Garden Clubs of Ohio; A. D. Taylor, president of the American Society of Landscape Architects, and Harold Madison, curator of the Cleveland Museum of Natural History. The guest speaker was the Honorable Martin L. Davey, governor of Ohio, who spoke eloquently of the beauties of the state and the affection he has for the profession of gardening. With the completion of his second term of office, he said, he will be happy to return to his life-long work at Kent as active head of the Davey Tree Expert Co. Entertainment and dancing brought the evening to an end.

Last Session.

The last business session was called to order Thursday morning at 9 o'clock. Unfinished business occupied the time until 11:30 a. m., when Prof. Alex Laurie, of the department of floriculture of Ohio State University, gave a short address in which he stated that he feels the present-day gardener needs as much knowledge as the commercial grower and that they both will profit by attend-

IF YOU plant
Tennessee
Natural Peach Seed
you will not be sorry. Reliable and Dependable. Write for prices on 1937 crop, 6000 to 7000 seeds to the bushel (50 lb.)

**Fruit Trees, Shade Trees,
Ornamental Trees,
Shrubs and Evergreens**

Southern Nursery & Landscape Co.
Winchester, Tennessee

Seedling Peach Pits

*A bountiful crop
— Lower prices*

Our pits compare favorably
with the best.

HOGANSVILLE NURSERIES
Hogansville, Ga.

PEACH PITS
THE
**Howard-Hickory
Company**
Hickory, N. C.



LARGE PEACH SEEDS
Surplus 200 bushels. \$1.50 per bushel.
10,000 1-year Peach
7/16, 9/16 and 11/16-inch.
Leading varieties.
50,000 Chinese Elm Seedlings.
Will exchange for Lining-out Evergreens and Shrubs.

EGYPTIAN NURSERY & LANDSCAPE CO.
Leo H. Graves
Farina, Ill.

Oregon-grown ROSEBUSHES

Send
for
List

PETERSON & DERING, Inc.
Wholesale Rose Growers
SCAPPOOSE, OREGON

A. MCGILL & SON

FAIRVIEW, OREGON

Wholesale Only

ROSES

Send us your list of wants

Fruit Tree Seedlings
Flowering Ornamental Trees
Shade Trees

Grown right and packed right

Combination carloads to eastern distributing
points save you on freight.

New Rose TEXAS CENTENNIAL

(Red Hoover)

Plant Patent No. 162

Ask for color illustration
and prices.

Also for our general list
of roses.

DIXIE ROSE NURSERY
Tyler, Texas

HARDY
Rosebushes
for 1938-39

HOWARD ROSE CO.
Hemet, California



MANETTI
Dormant Buds

Multiflora Japonica, rooted cuttings.

Quince stocks and seedlings.
ENSCHADE NURSERY
Hillsboro, Ore.

FRUIT TREE SEEDLINGS

Western-Grown Per 1000
Apple, 3/16-in. \$1.00
French Pear, 3/16-in. 12.00
Myersian Pear, 3/4-in. 12.00

These are well-rooted, sturdy, healthy seedlings,
on which we do our own budding and are sure to
please. Supply limited.

C. R. BURR & COMPANY, INC.
Dept. A—Manchester, Conn.

ing short courses. He derided the idea that gardeners who were trained in the old country know all that there is to gardening and declared that employers are interested in new developments and expect their gardeners to know something about them. He referred to the work being done by his department, including the fertilizing of trees and the best type of fertilizer to use and where to apply it. He pointed out the advantages of the cloth house, which he feels gardeners have neglected to use, and cited the results that could be obtained with various flowers. He gave the formula for an artificial manure which is ready for use in six to eight weeks and that is superior to the barnyard type. He called attention to a new mulch made of spun glass for winter, which, although still in the experimental stage, is proving efficient. Speaking of greenhouse culture, he pointed out that the private gardener needs flowers out of season more than anybody else and told how by the use of black cloth they could be obtained.

He referred to many magazine articles on growing plants without soil. This form of culture is the most outstanding development in years, he declared, but he questions its practicability in some respects. For greenhouses, however, he feels it is the coming thing and will be used extensively for commercial growing in the next five years. Station experiments have showed that roses, carnations, chrysanthemums and other flowers grown without soil are far superior to and larger than those grown in soil and that there is no telling to what size things may be grown. This type of culture, he pointed out, eliminates guesswork and saves labor. Everything can be controlled, but there still remains much to be learned about the method.

The remainder of the day was devoted to visiting private estates and in the evening the farewell banquet took place.

PLANT PATENTS.

Announcement has been made by Rummel, Rummel & Woodworth, Chicago patent lawyers, of the following plant patents.

No. 282. Rose. Edward Towill, Roslyn, Pa. A new and distinct variety of rose plant, characterized particularly by its blooms of distinctive color and pleasing form, its exceptionally long pointed buds, its vigorous growth and stiff stems and its prolific production as compared with Joanna Hill and Harry Kirk.

No. 283. Peach tree. Robert Walter Fair, Tyler, Tex. A new and distinct variety of peach tree characterized by its similarity to the Elberta in general details, but having an earlier ripening period of its fruit, a smoother and brighter color of the fruit due to scantiness of pubescence, and better flavor.

No. 284. Rose plant. Jean Gaujard, Feyjard, France, assignor to Jackson & Perkins Co., Newark, N. J. A new and distinct variety of rose plant, resulting from the cross of the two strains rugosa and Australian. Combining the characteristics of rugosa and the hybrid tea type of bloom of 2-tone color, adapted particularly for mass planting for garden decoration.

No. 285. Rose. The late Jean H. Nicolas, Newark, N. J., assignor to Jackson & Perkins Co., Newark, N. J. A new and distinct type of polyantha rose plant for pot forcing or garden use, characterized by its medium low, uniform growing and brilliant corse coloring of its flowers.

THE Mecklenburg Nurseries, Charlotte, N. C., of which W. C. Daniels is head, has been awarded a contract to do the planting for the post office at Greenville. The landscape work on this project will begin early next month.

Portland Wholesale Nursery Co.

306 S. E. 12th Avenue
Portland, Oregon

To the Trade Only

A complete line of
Nursery Stock and
Nursery Supplies.

Catalogue sent on request.

CONTRACT GROWERS ONLY

We do not grow for open market, either retail or wholesale, therefore do not compete with our contractors. This permits early and prompt shipments.
Let us quote you on Apple Grafts, Chinese Elm and Hackberry Seedlings.

WASHINGTON NURSERIES
Toppenish, Wash.

ESPALIER FRUIT TREES

Oregon Field-Grown

Large assortment of fine imported and domestic varieties of fruit trees.
Complete line of quality stock.
Ask for illustrated folder and wholesale price list.

UNITED STATES ESPALIER
NURSERY CO., Inc.

0304 S. W. Vermont St.
Portland, Oregon

MILTON NURSERY CO.

Milton, Oregon

"Pioneer Nursery of the Northwest"

Fruit, Shade, Flowering and Ornamental Trees, Fruit Tree and Chinese Elm Seedlings.
Car lot advantages to all points east.
Send for our Trade List.

ORENCO NURSERY CO.

Oreenco, Oregon

Wholesale Growers

Fruit, Shade, Flowering Ornamental Trees, Fruit-tree Seedlings, Roses, Etc.
Very complete line of quality stock
Catalogue sent on request.

PACIFIC COAST NURSERY

1436 N. E. Second Ave. PORTLAND, ORE.

Largest Fruit Tree Seedling Growers

In America.

We accept growing contracts for 3 to 5 years.
Quality stock. References on request.
John Holmason, Prop.

CATALOGUES RECEIVED.

[In writing for a copy of any of the catalogues reviewed below, please mention that you saw it described in *The American Nurseryman*.]

I. E. Ilgenfritz's Sons Co., Monroe, Mich.—Pocket-size price list of the Monroe Nursery for the fall season 1938. Lists evergreens, shrubs, shade trees, vines, roses, fruit trees and small fruits.

Joseph Brock & Sons, Boston, Mass.—A folder beautifully illustrated in color, listing tulips, hyacinths, croc, narcissi, daffodils and lilies for autumn planting.

Evergreen Nursery Co., Sturgeon Bay, Wis.—Mimeographed wholesale price list for fall 1938 and spring 1939, listing evergreen seedlings, transplants and specimens and deciduous lining-out stock.

Walton E. Milliman, Rockford, Mich.—An 8-page pamphlet listing peonies and English violets, also a few shrubs.

Manchu Nisan Shokai, Inc., Dairen, Manchuria—Dealers' list of Oriental novelties in fruit trees, conifers, ornamental trees, shrubs and climbers, perennials and herbs. Lilies and lawn seeds. For contract only. Frank Leckenby, Seattle, Wash., is the United States representative.

Gerard K. Klyn, Mentor, O.—A 16-page booklet illustrated in color listing Klyn's "Do-Bloom" roses. A wholesale list is included.

Bellatty Nut Nursery, Okanagan Valley, B. C.—A 20-page mimeographed booklet listing Canadian-grown nut trees.

Lamb Nurseries, Spokane, Wash.—A folder with wholesale trade list of nursery stock.

Fraser Nurseries, Inc., Birmingham, Ala.—A folder as advance lining-out list of evergreens, deciduous shrubs, vines and creepers and herbs, perennials and miscellaneous plants.

Bobbink & Atkins, Rutherford, N. J.—A folder as a florist's forcing list includes azaleas for forcing, decorative and foliage plants, roses, shrubs and rhododendrons.

George W. Peyton, Rapidan, Va.—A folder listing peonies in various colors, single and double.

Joseph F. Martin Co., Painesville, O.—A 48-page illustrated wholesale catalogue for fall, 1938. Listed are perennial plants, including delphinium, violets, violas, anchusa, columbine, asters, chrysanthemums and many other perennials. Also included are rock garden plants, shrubs and perennial seeds.

Cottage Gardens, Lansing, Mich.—A folder listing imported Holland bulbs, including tulips, narcissi, hyacinths and miscellaneous spring-flowering bulbs.

American Bulb Co., Chicago.—Well illustrated fall bulb catalogue for the trade, listing domestic and imported novelties. Major items are tulips, hyacinths, irises, narcissi, gladioli, callas and Easter lilies, which are featured strongly. There are also the miscellaneous small bulbs, such as scillas, croc, tuberos, begonias and gladiolus, nerines, caladiums, etc. Other offers include hydrangeas and others for spring, hostas, peonies and several other perennials for forcing and flower seeds, with sweet peas in large variety. Insecticides, fertilizers and greenhouse staples, offered through the American Florist Supply Co., occupy three pages.

Edgar L. Kline, Oswego, Ore.—A booklet of forty pages for 1938 and 1939, list of lilies for garden and greenhouse. The booklet is illustrated and contains a chart showing germination periods and sowing periods for various species. Included is a wholesale list.

William Borsch & Son, Inc., Maplewood, Ore.—A folder as wholesale trade bulletin for fall 1938 and spring 1939. The folder lists only stock which may be obtained in quantity.

Chugai Nursery Co., Yamamoto, Kawabegun, nr. Kobe, Japan.—A catalogue of twenty-eight pages listing seeds, plants and bulbs grown in Japan. Edgar L. Kline, Oswego, Ore., is agent for the United States.

Harmon Nurseries, Prospect, O.—A single-page wholesale price list of Oriental poppies, hemerocallis and peonies. Attached is a list of potted evergreens for lining out.

Forest Nursery Co., McMinnville, Tenn.—An 8-page printed folder as special convention bargain list, including fruit tree seedlings, broad-leaved evergreens, forest and shade trees, hardy deciduous flowering shrubs and miscellaneous items.

C. F. Wassenberg, Van Wert, O.—A wholesale price list of twenty pages for autumn 1938 and spring 1939, offering a large selection of peonies, poppies and irises. Also listed are day lilies.

Harrison's Nurseries, Inc., Berlin, Md.—Wholesale bulletin, dated July 9, 1938, offers peach, apple, pear, plum, cherry, nectarine and apricot trees for autumn 1938 shipment. Prices are not listed.

George L. Ehrl, Clifton, N. J.—A folder as wholesale price list, listing iris, hemerocallis, phlox, Oriental poppies and peonies.

Weller Nurseries Co., Inc., Holland, Mich.—A folder listing specimen evergreens for landscape work, also a folder of advance offers of specialties, novelties and scarcities in perennials for fall 1938 and spring 1939.

John Waterer Sons & Crisp, Ltd., Twyford, Berks, England.—A 100-page catalogue listing English grown bulbs, roses and fruit trees.

Robert Wyman, Bayside, Long Island, N. Y.—Folder illustrated in color, listing hybrid tea roses, peonies and iris.

Henry A. Dreer, Philadelphia, Pa.—Hundredth anniversary edition, Dreer's wholesale catalogue for florists, autumn, 1938, edition, listing bulbs, roses, perennial plants, shrubs, vegetable seeds, ferns, greenhouse plants and sundries.

Sei-Do Co., Marunouchi, Tokyo, Japan.—This 16-page illustrated booklet of the Japan Horticulture Co., Ltd., Oiso Kitaigawa, Kan, Japan, lists flower novelties. Included are orchid seedlings in test tubes or flask, pure white amaryllis and other novelties. Also included are tulips grown in northern Japan.

Long's Gardens, Boulder, Colo.—A printed list of four pages listing irises, poppies, pansies and peonies for summer and autumn delivery.

Hallawell Seed Co., San Francisco, Cal.—A 32-page illustrated booklet with cover is a wholesale list of flower seeds for florists and nurserymen dated fall 1938. The inside back cover contains a list of tree and shrub seeds.

Fisher Flowers, Germantown, Pa.—Two mimeographed sheets list hemerocallis for 1938-1939.

Corliss Bros., Inc., Gloucester, Mass.—A folder as wholesale price list dated fall 1938, lists hardy perennials and rock plants; included are rooted chrysanthemum cuttings.

Don Seed & Bulb Corp., Paterson, N. J.—Summer and autumn catalogue of twenty-four pages offers bulbs and roots for greenhouse use, bulbs for outdoor planting, perennial and biennial flower seeds, seeds for greenhouse culture and potted strawberry plants. Also offered are insecticides, tools and supplies.

Wayside Gardens Co., Mentor, O.—A wholesale catalogue, fall 1938, of sixty-four pages listing Dutch bulbs and hardy plants, attractively illustrated with inserts in color. Of special interest are the six varieties of Horvath's *setigera* hybrid roses offered through Wayside Gardens Co.

William N. Craig, Weymouth, Mass.—A 44-page booklet entitled, "Autumn Price List of Hardy Lilliums, Dutch Bulbs and Native American Plants." Thirty-nine of the forty-four pages list the lilies and Dutch bulbs, the remainder of the book being devoted to native plant materials, including ferns, roses, rock garden plants and herbaceous perennials.

Hoodacre Originating Gardens, Troutdale, Ore.—With the cover in color and many black and white illustrations, as well as color plates, the delphinium information book presents Hoodacre delphinium, both plants and seeds. Also included are brief articles on delphinium pests, coldframes and how to grow delphinium from seeds. Iris, day lilies and poppies are also listed.

Griffing Nurseries, Beaumont, Tex.—A printed price list in booklet form of 1938 wholesale nursery stock, with illustrations. All plants are listed alphabetically according to their common names.

L. D. Baker Peony Gardens, Kendallville, Ind.—Peonies of different classes are listed alphabetically, with irises. Collections of each are also offered. A folder describes the Baker plant market in zinc, which is illustrated.

Oberlin Peony Gardens, Sinking Spring, Pa.—A double-page circular listing many varieties of peonies, including European tree, Japanese tree, yellow lutea hybrid tree peonies and others in various colors. A dealer's wholesale price list is included.



NURSERY TOOLS

Nursery Spades, Kunde Knives and Pruning Shears, Budding and Grafting Supplies. Free 88-page Catalogue.

A. M. LEONARD & SON
Piqua - Ohio

Parker Gardens, Oelwein, Ia.—A 12-page illustrated booklet listing Parker's delphiniums, also including a short article on their method of delphinium culture.

Edward Auten, Jr., Princeville, Ill.—A 12-page booklet listing 140 varieties of Japanese, single, double, dwarf, miniature and novelty color peonies. Included is a dealer's wholesale price list.

TUSCHINSKY ON TRAVELS.

Alex Tuschinsky, president of the Hillsdale Landscape & Nursery Co., Indianapolis, Ind., left August 17 on a trip through the east of three weeks' duration, returning by way of Canada.

Besides being active as president of the Indiana Nurserymen's Association, Mr. Tuschinsky has had a busy season in his own nursery organization. A baseball team of employees has played an Indianapolis club each Sunday, and a picnic for all the employees and families was held August 6. In an attempt to drill a well to increase the water supply at the nursery, a supply of natural gas was found, with pressure of twenty-four pounds; so the well was tapped and the gas piped into Mr. Tuschinsky's home to heat it next winter. Another well was dug to secure water.

August 1 the federal government accepted from the company the landscape work on the housing project at Lexington, Ky., which required thirteen months to complete, as the grounds of fifty buildings were included. The stock used comprised 300 3-inch trees, 2,800 shrubs and vines and fifteen acres of lawn, the total figures on the job running above \$41,000.

MEMBERS of the New England Nurserymen's Association held a summer meeting and clambake August 24 at the Boulevard Nurseries, Newport, R. I. A number of nurseries and private estates were visited.

Nursery SUPPLIES

Tools and Labels
IMPLEMENTES
Spraying Equipment
TUBS—Chinese
Insecticides
FERTILIZERS
GENERAL SUPPLIES
Send for Free Catalogue

AMERICAN FLORIST SUPPLY

... 1335
W. Randolph St.

CHICAGO

CLARK GARDNER NURSERIES

Osage, Iowa

Originators of patented SEMI-POT-PLANT AND BULB PACKAGE for over-counter trade. Has WATERING TUBE and other unique features.

DREER'S Autumn Wholesale Catalogue

Every up-to-date nurseryman should have a copy of this interesting and helpful 68-page catalogue. More complete than ever—Dreer Quality Bulbs, Seeds, Greenhouse Plants, Climbers, Ferns, Roses, Perennial Plants and Sundries. Write for your free copy today.

HENRY A. DREER
Philadelphia, Pa.

FRESH CROP SEED

Dicentra Eximia—Plumy Bleeding Heart
1/4 oz., 50c; oz., \$1.50; 1/4 lb., \$5.00
We are also gathering from our own nurseries, and receiving from specialists, fresh seeds of all the leading varieties, for instance:

Delphinium Cliveden Beauty
Improved strain of Belladonna. Our own seed just gathered.

oz., \$1.20; 1/4 lb., \$4.00; lb., \$15.00
Delphinium Good Value Hybrids
From finest English and American strains.

1/4 oz., 60c; oz., \$2.00; 1/4 lb., \$6.00
Special prices for present only.
Write for complete catalogue.

THE MARTIN-PRATT SEED CO.
Box 189N Palmeville, Ohio

MONTANA JUNIPER SEED

J. scopulorum, 40c to 80c per lb.
J. communis or **J. horizontalis**, \$1.00 per lb.

Mahonia repens, the hardy mahonia, db., \$1.50 per lb.

Leparygryea (shepherdia) canadensis, db., \$2.50 per lb.

Alpines and wild flower seed wholesale. Send us your seed want list.

NATIVE EVERGREENS
Missoula, Mont.

LAWN GRASS SEED

	100 lbs.
Velvet Lawn Mixture	\$13.50
Kentucky Bluegrass, extra fine	12.50
Redtop, fancy silver seed	11.00
American Rye Grass	6.50

A. H. Hummert Seed Co.
2746-48 Chouteau Ave.
St. Louis, Mo.

SEEDS

Tree and Shrub
Perennials

HERBST BROTHERS
92 Warren St., New York, N. Y.

TWIN CITIES NOTES.

J. Juhl, of the Hoyt Nurseries, St. Paul, gave a practical talk on "Planting" August 22 at the monthly meeting of the Ramsey County Garden Club. A recommendation to prevent sunscald was to wrap the trunks of newly planted trees with the type of asphalt paper that will stretch. In planting evergreens, he said, it is well to remember that all junipers can be planted at any time in the summer. Spruces and pines, on the other hand, for late planting, are best dug in the spring, balled and then replanted in the ground. This appears to produce hardier stock, which can be planted up to October 20. The speaker stated he had turned down late orders for evergreens because of low soil temperatures. He preferred to plant at a season when root action can continue. After June 1, there are six to eight weeks of good planting conditions for most evergreens.

Earlier planting of perennials is advised, so that the roots of the plants can really take hold in the soil before fall arrives. What has hitherto been called fall planting was frowned upon, and everyone was urged to plant as early as possible. The speaker's remarks regarding earlier planting of evergreens was in line with statements made to the writer recently by Mr. Hughart, Hamel, who spoke strongly in favor of planting as soon as trees or shrubs have finished their growth.

L. R. Fischer, nurseryman of Minneapolis, left for Winnipeg, Man., Monday night, August 22, to serve as one of the judges at a gladiolus show there.

Daniels Nursery, Inc., Long Lake, staged a good display at Buffalo and Hopkins. The firm made a feature of the fact that it is the silver anniversary of the founding of the nursery.

Mr. and Mrs. Paul Eddy, of Howard Lake & Victor Nurseries, Howard Lake, staged a group of evergreens and blooming perennial plants at the Buffalo Horticultural Society flower show. One of the features of this group was a large basket of fruits of many kinds, gathered from the nursery.

BUSINESS RECORDS.

Foster, O.—Belden C. Saur filed a voluntary petition in bankruptcy August 3, listing liabilities of \$12,972 and no assets. He operated the Rocknoll Nursery on land leased from Mrs. L. O. Saur.

St. Paul, Minn.—The final report of Horace H. Glenn, referee in bankruptcy in the case of George W. Strand, Taylor Falls, Minn., bankrupt, shows the amount realized from assets as \$881.13. Disbursements for fees and expenses took the major portion of this sum, leaving a dividend of 2.2 per cent to general creditors, amounting to \$346.73.

Cleveland, O.—A final meeting has been called for September 9, at 2001 N. B. C. building, by C. D. Fribolin, referee in bankruptcy, to pass on the final report in the case of Associated Flower & Supply Co. Receipts are \$5,822.10, and after disbursements for fees and expenses the sum of \$3,711.53 remains for a dividend to creditors of 30.17 per cent on ninety-two unsecured claims filed and allowed, totaling \$12,301.70. Forty-three unsecured claims were scheduled and not filed, amounting to \$1,409.75, and priority claims were \$510.99.

PERENNIAL SEED

Ornamental perennials, so readily and economically grown from seed, are becoming increasingly appreciated. Our sales of this seed to the trade surprisingly indicate it. Through our Trial Grounds and wide connections with seed growers, we are in a favorable position to supply your wants in this growing line.



Showy, Hardy Lilies

Siberian Coral Lilies (*L. tenuifolium*) and single **Tiger Lilies** (*L. tigrinum splendens*) are most colorful, easiest to grow. Our prices are way down. Look:

Coral	Per 100	Tiger	Per 100
1 to 1 1/2 ins.	\$1.40	2 to 3 ins.	\$1.20
1 1/2 to 2 ins.	1.80	3 to 4 ins.	1.80
2 to 2 1/2 ins.	2.40	4 to 5 ins.	2.80
2 1/2 to 3 ins.	3.00	5 to 6 ins.	4.50
3 to 3 1/2 ins.	4.50	6 to 7 ins.	6.00
3 1/2 to 5 ins.	6.50	7 to 8 ins.	7.50

Write for special prices for large quantities, also for **Regale**, **Henryi**, **Willmott**; **Muscari**, **Daffodils** and other bulbs. Our stock is first-class, carefully packed (at no extra cost to you) to reach you in prime condition.

Frank M. Richard, Jr.
P. O. Box 363 Fort Collins, Colo.

NORTH DAKOTA SEEDS

ARCTOSTAPHYLOS UVA-URSI
(Kinnikinnick)
Juniperus scopulorum, c. s.
Rhus trilobata (Aromatic Sumac)
Crataegus douglasii, *Juniperus communis*, *Prunus virginiana* and *Shepherdia argentea*, c. s.

E. C. MORAN
Medora, N. D. Summer address Gorham, N. D.

LILY BULBS AND SEED

Write today for your copy of our 1938 Fall catalogue and trade price lists containing cultural information and complete descriptions of over 100 varieties of Domestic and Imported Lilies and Lily seeds.

EDGAR L. KLINE, Grower & Importer
Oswego, Oregon

FALL BULBS

Tulips, Hyacinths, Narcissi, Crocus, etc.
Send for Price List ready now.

THE WILLIS NURSERY CO.
OTTAWA, KANSAS

HERBS

Pot-grown plants; over a hundred varieties. Dried Herbs for Flavoring and Fragrance. Other plants of unusual character and with the charm of old-time gardens.

Write for Catalogue

Weathered Oak Herb Farm, Inc.
BRADLEY HILLS, BETSEDA, MARYLAND

SOUTHWESTERN NOTES.

The Kansas State Horticultural Society will hold its annual meeting December 1 and 2 at Topeka. Plans are being made to hold the winter meeting of the Association of Kansas Nurserymen at the same time and place, and if possible to conduct a school for nurserymen in connection with the meeting. George W. Kinkead is secretary of the Kansas State Horticultural Society.

O. W. Hinshaw, formerly of the Greenwood County Nursery Co., Eureka, Kan., and C. C. Hefele have opened the Riverside Nurseries & Gardens at Tulsa, Okla. The office and display grounds are at 1636 South Harvard street, while the stock is being grown south of Tulsa near Jenks. The firm expects to handle all kinds of nursery stock, but intends to make a specialty of landscape plantings.

Rhea McCandliss, for the past six years manager of the Kansas Evergreen Nursery, Topeka, Kan., severed her connection with that firm June 1. Miss McCandliss is now conducting her own business, operating temporarily from her home, at 1134 High avenue, under the title "Hortensia" (lady gardener). She plans to secure a small tract of land adjoining one of the new subdivisions in Topeka, where she will construct an office and develop a display ground. The business not only affords complete landscape service in the drawing and execution of plans, but will be in a position to move large trees. Another feature of the business is lawn maintenance, which affords an opportunity to make contacts which lead to landscaping jobs. Miss McCandliss has started the publication of a well edited monthly bulletin on subjects of interest to home gardeners. The uniform punched sheets may be filed for future reference in a loose-leaf notebook, which she supplies.

FLOOD DAMAGE IN TEXAS.

Colorado river floods have caused losses to many south Texas trade members, and reports are that perhaps the heaviest loser is Eugene Howard, who estimates the loss to Howard's Montopolis Nursery, a few miles below Austin, at nearly \$50,000. Forty acres of Mr. Howard's place planted to ornamental shrubbery and evergreens were covered with four feet of sand after the flood. A block of the 6-year-old Pfitzer junipers was entirely covered, and other choice evergreens were left with only their heads showing above the sand. The city built a sewage disposal plant with a high retaining wall, which caused a current of water where at normal times there was still water. This split the current and caused the sand to be deposited on Howard's place.

SKOGLAND JOINS A. S. L. A.

Herbert Skogland, who has practiced as a landscape architect at Houston, Tex., for a number of years, received publicity in local newspapers recently on his admission into membership of the American Society of Landscape Architects.

Mr. Skogland, a graduate of the University of Illinois, has developed many outstanding estates near Houston and designed several of the state parks. Before going to Texas, he had business offices at Omaha, Neb., and St. Joseph, Mo. With his brother, who was super-

intendent of parks in St. Joseph, he helped to build up the system of parks for which the city is now famous.

THE Union Lumber Co., Fort Bragg, Cal., is discontinuing its nursery.

T. KIYONO, nurseryman of Crichton, Ala., was in Berlin, Germany, July 30.

A NEW nursery was opened recently at 4502 East Seventh street, Long Beach, Cal., by Arthur A. Jones, landscape designer and nurseryman.

CARL O. SJULIN, one of the three brothers who operate the Inter-State Nurseries, Hamburg, Ia., was nominated June 6 for state senator on the Republican ticket.

W. L. FULMER, Seattle, president of the Washington State Nurserymen's Association, has booked passage on the Empress of Japan, sailing September 17, for a vacation in Honolulu.

LINDALE NURSERY is the new name of the Yamato Gardens, operated by Robert K. Amamato at Houston, Tex. The address of the firm has been changed from 401 Tuam avenue to Route 2, Box 1355.

THE Munson Nursery, Denison, Tex., has been bought by Ross R. Wolfe, owner of Wolfe's Nurseries, Stephenville, Tex., who will move the stock and equipment to the latter point. The Munson Nursery has been famous for years for superior grape varieties, many of them originated by the late T. V. Munson, founder of the nursery, over sixty years ago. Mr. Wolfe started a peach nursery at Stephenville some fifteen years ago and has expanded the fruits and ornamentals.

HELP WANTED

Man to work in landscape department of established nursery; must have experience and produce results. Give references and state age. Address No. 103, c/o American Nurseryman, 508 S. Dearborn St., Chicago, Ill.

HELP WANTED

Landscape salesman wanted. Must be capable of designing, estimating, selling and superintending landscape developments. A. Wiegand's Sons Co., 26th and Kessler Blvd., Indianapolis, Ind.

CLASSIFIED ADVERTISING

Peonies: Tree and Herbaceous, best varieties. **Oberlin Peony Gardens, Sinking Spring, Pa.**

Hemlock, 8 to 12 ft.; Austrian Pine, Jack Pine, Red Spruce, Honey Locust, American and Moline Elm.

Elmwood Nursery, Leetsville, Mich.

Azaleas, Rhododendron Maximum, Flowering Dogwood, Mountain Laurel, Hemlock and Holly, 2 to 4 ft., 25 for \$3.00; \$10.50 per 100. Seedlings, \$3.00 per 100, \$25.00 per 1000.

Azalea Farms, Doeville, Tenn.

Cotoneaster Divaricata, spreading cotoneaster, from 2-in. pots, \$10.00 per 100. **Evonymus, Patens and Radicans**, from 2½-in. pots, \$7.00 per 100. Prices are f.o.b. Kansas City. Terms: Cash or c.o.d.

Glasscock Bros., 6119 Agnes, Kansas City, Mo.

2-year Evergreen Seedlings.

Postpaid, \$1.00 per 100, \$6.00 per 1000. Colorado Blue Spruce, White Spruce, Norway Spruce, Red Spruce, Mugo Pine, Norway Pine, Balsam Fir. Some larger sizes priced to sell.

Also new top trees, seeds, per lb., postpaid: Balsam Fir, \$1.75; Norway Pine, \$5.00; White Pine, \$1.75; Arbor-Vitae, \$2.75.

Braden Nursery, Gray, Maine.

Table of Contents

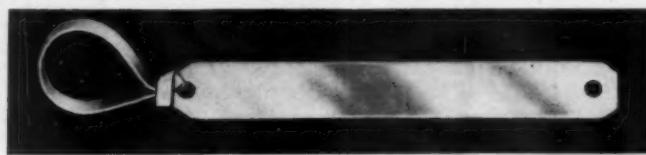
Autumn Planting	2
Competition	2
Berberis Verruculosa	2
Soil Disinfection	3
By Glenn O. Randall	
"Incubator" Fruits	4
"Every Man under His Own Tree"	5
By W. J. Cameron	
Redelberta, A New Peach	6
Fruit Prices Down	6
New and Uncommon Perennials	7
By C. W. Wood	
Broom Shrubs	8
Native Chimaphila	8
Opportunities Overlooked (illus.)	9
By Charles M. Smith	
Ten Years' Progress (illus.)	10
Lilacs in Northwest	10
A. A. N. Committees Appointed	11
To Revise Standards	11
White to Visit West	11
Charlie Chestnut	12
Helps Make Up Annual Statement	
Oregon Rose Tests	14
Oregon Licenses Issued	15
Ripening Fruit Defoliates Holly	15
Coming Events	16
—Convention Calendar	16
—Texas Program	16
—California Meeting	16
—Rose Society Meeting	16
—Nut Growers to Meet	16
Mount Arbor Opens Branch	16
—Howard S. Chard (portrait)	16
Graves Joins Wyman Firm	17
White-fringed Beetle Ban?	17
Summer Meetings	18
—Ohio Summer Meeting	18
—Wisconsin Meeting	18
—Kentucky Meeting	18
—Washington State Meeting	18
—New Jersey Co-operation	18
Southern California Notes	19
Gardeners' Convention	20
Plant Patents	21
Catalogues Received	22
Tuschninsky on Travels	22
Twin Cities Notes	23
Business Records	23
Southwestern Notes	24
Flood Damage in Texas	24
Skogland Joins A.S.L.A.	24
Obituary	25
—D. M. Andrews	25
—William Russell May	25

PERMA-LABELS

(Trade Mark)

Permanent Metal Labels for labeling trees, shrubs, roots and small bundles of seedlings or transplants, etc. Bury them, submerge them, expose them to weather or storm—They do not rust, corrode nor deteriorate.

Pat. Appl'd For



PERMA-LABELS cut your labeling costs in half.

There are five easy ways to attach to all caliper stock.
Write on them with an ordinary pencil for permanent record.

PERMA-LABELS can be ordered embossed one or three lines type at slightly higher prices.
Write for samples and literature. Mention quantity interested in for Quantity Prices.

PERMA TAG & LABEL CO.

Box A23

Creston Sta., Grand Rapids, Mich.

OBITUARY.

D. M. Andrews.

Pneumonia, with a weakened heart after several months of illness, brought death to D. M. Andrews, pioneer nurseryman and horticulturist of Boulder, Colo., August 14.

Mr. Andrews was born in 1869, at Farina, Ill., which he left as a young man to attend a college at Milton, Wis., having been taught until then by his mother, a college graduate, as there were few schools in their pioneer town. In 1893 he went to Boulder and married Mary Wheeler, who had gone there with her father and whom he had met while they were both students at Milton.

Mr. Andrews started his business with a small tract at Fourth and Arapahoe streets, the enterprise developing into the present Rockmont Nursery. His interest in horticulture he gained from his mother and part of his way at college he paid by plant collecting. He exhibited many specimens at the Chicago world's fair in 1893.

Mr. Andrews' chief interest became alpines and the domestication of other native Colorado plants, although he introduced a number of peonies, lilacs and irises among other plants. Frequently his wife accompanied him on his plant-hunting expeditions, usually in the high mountains. Two years ago, the University of Colorado awarded him the honorary degree of master of science.

For many years Mr. Andrews was president of the Boulder Nurserymen's Association; he was an honorary member of the Denver Home Garden Club and belonged to the Massachusetts Horticultural Society.

Besides the widow, Mr. Andrews is survived by a son, Philip, who left Boulder in the spring to resume geology in Venezuela, and a daughter, Mrs. Mildred Steele, Boulder. Another daughter, Mrs. Hazel Cattell, died several years ago. There are seven grandchildren.

Funeral services were held August 16, at the Hall-Kelso mortuary, by the Rev. Lueius F. Reed. The body was cremated.

William Russell May.

William Russell May, nurseryman of Lees Summit, Mo., died August 15 on his thirty-ninth birthday anniversary, at the Jackson County Emergency hospital.

WRITE FOR 10-DAY TRIAL OFFER on this High Pressure PARAGON SPRAYER



Send prices and details as per advertisement in American Nurseryman for September 1.

TEST it for yourself. Compare results with what you have been getting from your present sprayer. Use any spray solution or cold water paint. Spray your nursery stock, whitewash your greenhouses, barns and tool sheds, inside and out. Note how easily this Paragon delivers powerful uniform pressure at the nozzle with little effort at the pump handle. Passes through narrowest aisles without jamming at corners. Automatic agitator prevents solution from settling. We guarantee it never to clog while in use. Ten days trial costs you nothing if not satisfied. If your dealer does not sell the Paragon, mail the coupon today.

The
Campbell-Hausfeld
Company

903 State Ave.
Harrison, Ohio

Name Post Office
Street State



1 or 2 wheel truck

SPECIAL OFFER
Sample Copy Plate Book, 50¢
Prints, Maps and Folios
Process Color Printing Co.
701 Searle Bldg., Rochester, N. Y.

PERMANENT PLANT

MARKERS GALVANIZED IRON—parts of service. ALUMINUM CARDS—pre-ruled, numbered, with lines for notes and writing with pencil. Cannot blow out, but you can change card when required. Prices including: Aluminum Cards: 50 to 500, 3¢ each; 500 or more, 2 1/2¢ each. With paper cards, 1¢ each less. Postage not included. Send 6¢ in stamp for sample Marker.

THE W. F. NORMAN SHEET METAL NEVADA MFG. CO., MIAMI



EASY TO READ...
large Card
13/16 in.
Tilted; no stooping to read....

Nursery & Florist **MOSS**

Wire and burlap bales, large size. If you are interested, drop us a card. We shall be pleased to quote you our lowest possible price. Have been in the moss business since 1896. This should mean something to you. The oldest dealer in the state. Our reference—Dun & Bradstreet, Inc.

THE MOSS CO., Mather, Wis.

A CONTRACT was awarded to the Northwest Landscape & Nursery Co., Portland, Ore., to beautify the new state capitol grounds at Salem. The bid was \$12,367 for this job, work on which must be completed by November 1.

FRED G. SANTY, Malone, N. Y., has established the Northside Nurseries at 94 Constable street. Mr. Santy was superintendent of Morningside cemetery for twenty years before he recently resigned to go into business for himself. He expects to add a greenhouse in the near future.

USE OF
HORMONES
MADE EASY
WITH
ROOTONE
PATENTS PENDING
A HORMONE POWDER
FOR
ROOTING CUTTINGS
NO SOLUTIONS NEEDED
MEASURING
SOAKING
VIALS
ANYONE can apply it!

Just dip the base of the cutting in **ROOTONE** and immediately set in the propagating bed. Lowest chemical cost per cutting and practically no labor cost. Eliminates risk of over dosage.



CANADIAN HEMLOCK

Left: Untreated.
Right: Treated with **ROOTONE** powder.

FOR DUSTING SEEDS

Kills seed-borne fungi; increases root system and top growth of plants. Gives stronger plants.

JUST DUST AND PLANT

See your dealer or —

*Send \$1.00 for a
package which treats up
to 3,000 CUTTINGS.*

FREE CIRCULAR ON REQUEST

WRITE

**AMERICAN CHEMICAL
PAINT CO.**
HORTICULTURAL DIV. 4
AMBLER PENNA.

INDEX TO ADVERTISERS

Aeroil Burner Co.	27
American Chemical Paint Co.	26
American Florist Supply Co.	22
Andrews Nursery	17
Ariens Co.	27
Azalea Farms	24
Ball, Inc., Geo. J.	23
Bay State Nurseries, Inc.	13
Bean Mfg. Co., John	22
Blountville Nurseries	19
Bobbink & Atkins	14
Bountiful Ridge Nurseries	15
Braden Nursery	24
Burr & Co., C. R.	21
Campbell-Hausfeld Co.	25
Carpenter & Co., Geo. B.	27
Castle Chemical Co.	27
Chase Co., Benjamin	27
Check-R-Board Fencing Co.	27
Cloverset Flower Farm	27
Cottage Gardens	16
Dixie Rose Nursery	21
Dow Chemical Co.	27
Dreer, Henry A.	23
Eden Nurseries	16
Egyptian Nursery & Landscape Co.	20
Elmgrove Nursery	24
Enschede Nursery	21
Evergreen Nursery Co.	19
Fairview Evergreen Nurseries	17
Forest Nursery Co.	12
Foster Nursery Co.	17
Four Winds Farm Nursery	15
Fremont Nursery	17
Garden Shop, Inc.	28
Gardner Nurseries, Clark	22
Glasscock Bros.	24
Graettinger Nursery	19
Harmel Peony Co.	16
Harmon Nursery	17
Hauck Mfg. Co.	28
Herbst Bros.	23
Hess' Nurseries	15
Hill Nursery Co., D.	19
Hobbs & Sons, C. M.	19
Hogansville Nurseries	20
Howard-Hickory Co.	20
Howard Rose Co.	21
Hummert Seed Co., A. H.	23
Jackson & Perkins Co.	15
Jewell Nursery Co.	19
Johnson, F. L.	17
Kline, Edgar L.	23
Koster Co., Inc.	15
Landers Corp.	27
Leonard & Sons, A. M.	22
Lovett, Lester C.	15
Martin-Pratt Seed Co.	23
Mathews Eggert Nursery	17
McGill & Son, A.	21
Meehan Co., Thomas B.	27
Milton Nursery Co.	21
Moran, E. C.	23
Moss Co.	25
Mount Arbor Nurseries	19
Native Evergreens	23
Natorp Co., W. A.	17
Norman Sheet Metal Mfg. Co., W. F.	25
Oberlin Peony Gardens	24
Offenberg Nursery Co., Paul	17
Orenco Nursery Co.	21
Pacific Coast Nursery	21
Patton, I. C.	17
Perma Tag & Label Co.	25
Peterson & Dering, Inc.	21
Portland Wholesale Nursery Co.	21
Princeton Nurseries	15
Process Color Printing Co.	25
Richard, Jr., Frank M.	23
Rocky Mountain Evergreen Co.	19
Scarf's Nurseries	17
Schnell's Nurseries	19
Shenandoah Nurseries	19
Sherman Nursery Co.	19
Southern Nursery & Landscape Co.	20
Springdale Nursery	15
Storrs & Harrison Co.	13
Swink Nursery Co.	19
Tabor, Rollin H.	27
United States Espalier Nursery Co.	21
Washington Nurseries	21
Wassenberg, C. F.	16
Waynesboro Nurseries, Inc.	15
Weathered Oak Herb Farm	23
Westminster Nurseries	15
Willis Nursery Co.	23
Wyman's Framingham Nurseries	28

Results Bring Advertising

Current issues carry from 25 to 30% more than those of a year ago because of the increasing recognition that in the American Nurseryman

Advertising Brings Results

Use it to increase your sales this fall.

SAVE THOSE TRANSPLANTS!

USE DOWAX

DOWAX*, the scientific wax emulsion for preventing drying out of trees and shrubs, has accomplished remarkable results in reducing mortality among transplants. By applying DOWAX, one user transplanted eighty different varieties of shrubs in full leaf during July with practically no loss.

Other reports from users of DOWAX indicate its outstanding success in reducing mortality among large transplanted shade trees, in reducing winter injury to ever-

greens and promoting growth of backward shrubs and trees. Users report DOWAX superior to wrapping for borer control, and for reducing transpiration of thin-bark trees. DOWAX can be applied with any type spray equipment. Its semi-permeable, moisture-conserving film does not penetrate or injure plant tissue—cannot melt or run. Use this scientific material to protect your trees and shrubs. It will pay you dividends in greatly reduced replacement costs.

Vitalize Your Transplants with DOWAX

THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN
Branch Offices: 30 Rockefeller Plaza, New York City; Second and Madison Streets, St. Louis; Field Bldg., Chicago.
*Trade Mark Reg. U. S. Pat. Off.

WRITE FOR THE DOWAX BOOKLET TODAY



Make More Profit
Sell Your Roses, Perennials, Shrubs, Vines and
Fruit Trees Started and Growing in

CLOVERSET PLANT POTS



Patent No. 2073695

Nursery Stock grown in Cloverset Patented Pots can be sold and planted without wilt to bud or bloom any time during the hot summer months. Hardy Chrysanthemums grown in Cloverset Pots will make money for you next fall.

Write today for Free Illustrated circulars and testimonials from users of these pots.

Carton of samples by mail 25¢.

Cloverset Flower Farm
ERNEST HAYSLER and SON
105th Street and Broadway, Kansas City, Mo.

KILL WEEDS WITH FIRE!

Burn weeds now and destroy SEEDS as well as weeds. AEROL BURNER is quickest, safest, most economical way. Disinfects poultry and live stock quarters. 93 other uses.

FREE Send for 48-page Book solving 99 Farm Problems. Used & Endorsed by 100 Agric. Expt. Sta.

AEROL 10 DAY FREE TRIAL

TRY THIS WEED BURNER AT OUR EXPENSE

STERITEX

The scientific Covering Material used in the sterilization of soil by the pipe or tile steam method.—A heavy duck impregnated with steam-proof rubber . . . insuring complete and uniform sterilization. Pays for itself in one cooking by reduced fuel consumption.

Moderately Priced.

Write for prices and samples.

The Landers Corporation
837 Buckingham St. TOLEDO, OHIO
Established 1886

Do You Use Twine?

Sisal—Java—Jute—Cotton? Why not mail sample of the twine you are using—tell us its purpose and we will recommend the best for your job and quote prices. No obligation.

Get this booklet FREE "Knots the Sailors Use." 8 pages, 79 pictures. You and the boys can get real pleasure from it.

GEO. B. CARPENTER & CO.
440 No. Wells St. CHICAGO, ILLINOIS

LABELS FOR NURSERYMEN

THE BENJAMIN CHASE COMPANY
DERRY, N. H.

TREE SUPPLIES
Tabor's Tree-wound Dressings
for Treatment of Tree Injuries.
Tree bracing rods, nuts and washers.
Cabling and guying materials.
For Ratings, write
ROLLIN H. TABOR Mt. Vernon, Ohio

PROTECT TREES - SHRUBS
against Rabbits
with **COPPER SOAP**
RODENT REPELLENT

Easily applied—economical—effective. Single application lasts an entire year. Quart, \$1.00 postpaid—covers 50 trees; Gallon, \$3.00; 5 gallons, \$12.00.

Write for detailed literature.
SPECIAL PRICES TO NURSERYMEN

Castle Chemical Co.
Castle Rock, Minn.

CHECK-R-BOARD PLANT SCREEN
Neat, Cheap and Durable, Summer or Winter
5 ft. wide; any height to 6 ft., 12¢ per sq. ft.
Special coldframe covers, \$2.15
F. o. b. Philadelphia
Send for dealers' discount and list
CHECK-R-BOARD FENCING CO.
1262 E. Washington Lane, Germantown, PHILA., PA.

"RED STAR" RAFFIA

	Prices per lb.	Prices per lb.
1 lb.	20¢	100 lbs. 13¢
10 lbs.	16¢	1 bale (225 lbs.) 11¢
25 lbs.	15¢	3 bales 10½¢
50 lbs.	14¢	5 bales 10½¢

Special prices on larger quantities

Dyed Raffia in fifteen good colors
Genuine Reed in all sizes
Send for latest price list

THOMAS B. MEEHAN CO.
Direct Importers of Raffia
DRESHER, PA.

ARIENS-Tiller
The American
TILLAGE COMBINE
3 MODELS TO FIT
EVERY NEED
ARIENS CO.
Box 710 Brillion, Wis.

WYMAN for TAXUS

TAXUS

in all styles and shapes, in fine textures and coarse—in all sizes, small, medium and large. Not only usual varieties but also new rare beautiful hybrid sorts.



TAXUS

is today's and tomorrow's pre-eminent evergreen. There is at least one variety of TAXUS that will fill every need for evergreens in the landscape. Ask us about them.



The fastest growing hardy TAXUS—*Taxus media wymani*—now makes possible in America the famous landscape effects of England, until now accomplished only with varieties which are tender here.

HARDY RHODODENDRONS and AZALEAS
also a general line of ornamentals

Framingham Nurseries

WYMAN'S

Framingham, Mass.

BURN OFF CRAB GRASS !

Kill next year's weeds now
with Hauck Flame-Gun



*Inexpensive
Easy to Operate
Economical
Safe*

Now is the time to get rid of crab grass and assure a vigorous, healthy lawn next year. Just burn over the infested area with a Hauck Flame-Gun, so that seeds which are on top of the ground are killed. Then apply a good fertilizer and your lawn will quickly establish itself—free from crab grass. (See American Nurseryman, August 15 issue, page 6, for methods employed successfully by Hauck Flame-Gun users.)

The Hauck Flame-Gun is absolutely safe, economical and easy to use. It offers many uses for nurserymen—to clean up seed rows, destroy weeds and otherwise clear the growing fields, etc., etc. Pays for itself in time, money and labor saved. Satisfaction guaranteed. 10-day free trial. 4 sizes: Vulcan, \$15.00; Vulcan Glider, \$16.00; Little Giant, \$24.00; Hercules, \$44.00. (All prices F.O.B. Brooklyn, Chicago or San Francisco.) Write today for full information and free descriptive literature.

HAUCK MFG. CO.
185 Tenth St., Brooklyn, N. Y.

Buy now and be ready for the fall SEASON



Dual Pneumatic Tired Wheelbarrow

Many nurserymen who have these carriers tell us they save the labor of one and two men on many types of work.

Evergreen Carriers

Steel Wheel \$20.00
Dual Pneumatic Tired... 29.50
Nursery Hand Truck... 27.50

All prices F.O.B. Kansas City.

The Garden Shop, Inc.

Manufacturers of Automotive
Tree-moving Machines, Carts
and Wheelbarrows

4819 Mission Road,
Kansas City, Kans.



Nurserymen's Hand Truck